Naval Education and Training Command
NAVEDTRA 43354-C
April 2003

# PERSONNEL QUALIFICATION STANDARD

FOR

# VISUAL COMMUNICATIONS

**NAME (Rate/Rank)_____**

**DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited.**

Although the words “he”, “him,” and “his” are used sparingly in this manual to enhance communication, they are not intended to be gender driven nor to affront or discriminate against anyone reading this material.

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# INTRODUCTION

## PQS PROGRAM

This PQS program is a qualification system for officers and enlisted personnel where certification of a minimum level of competency is required prior to qualifying to perform specific duties. A PQS is a compilation of the minimum knowledge and skills that an individual must demonstrate in order to qualify to stand watches or perform other specific routine duties necessary for the safety, security or proper operation of a ship, aircraft or support system. The objective of PQS is to standardize and facilitate these qualifications.

## CANCELLATION

This Standard cancels and supersedes NAVEDTRA 43354-B.

## APPLICABILITY

This PQS is applicable to all ships equipped with visual communications equipment.

## MODEL MANAGER

The Model Manager Command manages a specific PQS manual. This includes overseeing the process of monitoring and updating assigned PQS manuals from the standpoint of technical content and relevance within the community.

## TAILORING

To command tailor this package, first have it reviewed by one or more of your most qualified individuals. Delete any portions covering systems and equipment not installed on your ship, aircraft or unit. Next, add any line items, fundamentals, systems and watchstations/workstations that are unique to your command but not already covered in this package. Finally, the package should be reviewed by the cognizant department head and required changes approved by the Commanding Officer or his designated representative. Retain the approved master copy on file for use in tailoring individual packages.

# INTRODUCTION (CONT'D)

## QUALIFIER

The PQS Qualifier is designated in writing by the Commanding Officer to sign off individual watchstations. Qualifiers will normally be E-5 or above and, as a minimum, must have completed the PQS they are authorized to sign off. The names of designated Qualifiers should be made known to all members of the unit or department. The means of maintaining this listing is at the discretion of individual commands. For more information on the duties and responsibilities of PQS Qualifiers, see the PQS Unit Coordinator's Guide.

## CONTENTS

PQS is divided into three sections. The 100 Section (Fundamentals) contains the fundamental knowledge from technical manuals and other texts necessary to satisfactorily understand the watchstation/workstation duties. The 200 Section (Systems) is designed to acquaint you with the systems you will be required to operate at your watchstation/workstation. The 300 Section (Watchstations) lists the tasks you will be required to satisfactorily perform in order to achieve final PQS qualification for a particular watchstation/workstation. All three sections may not apply to this PQS, but where applicable, detailed explanations are provided at the front of each section.

## REFERENCES

The references used during the writing of this PQS package were the latest available to the workshop, however, the most current references available should be used when qualifying with this Standard.

## NOTES

Classified references may be used in the development of PQS. If such references are used, do not make notes in this book as answers to questions in this Standard may be classified.

## TRAINEE

Your supervisor will tell you which watchstations/workstations you are to complete and in what order. Before getting started, turn to the 300 Section first and find your watchstation/workstation. This will tell you what you should do before starting your watchstation/workstation tasks. You may be required to complete another PQS, a school, or other watchstations/workstations within this package. It will also tell you which fundamentals and/or systems from this package you must complete prior to qualification at your watchstation/workstation. If you have any questions or are unable to locate references, contact your supervisor or qualifier. Good luck!

## PQS FEEDBACK REPORTS

This PQS was developed using information available at the time of writing. When equipment and requirements change, the PQS needs to be revised. The only way the PQS Development Group knows of these changes is by you, the user, telling us either in a letter or via the Feedback Report contained in the back of this book. You can tell us of new systems and requirements, or of errors you find.

# ACRONYMS USED IN THIS PQS

Not all acronyms or abbreviations used in this PQS are defined here. The Subject Matter Experts from the Fleet who wrote this Standard determined the following acronyms or abbreviations may not be commonly known throughout their community and should be defined to avoid confusion. If there is a question concerning an acronym or abbreviation not spelled out on this page nor anywhere else in the Standard, use the references listed on the line item containing the acronym or abbreviation in question.

| | |
|---|---|
| AAV | Amphibious Assault Vehicle |
| ABGC | Assistant Boat Group Commander |
| ACCS | Assistant Central Control Ship |
| ACP | Allied Communication Publication |
| ALMS | Approach Land Marker Ship |
| BGC | Boat Group Commander |
| BWC | Boat Wave Commander |
| CCS | Central Control Ship |
| CRTS | Casualty Receiving Treatment Ship |
| CWDD | Chemical Warfare Directional Detector |
| DON | Department of the Navy |
| DTG | Date Time Group |
| EAP | Emergency Action Plan |
| EMCON | Emissions Control |
| FOD | Foreign Object Damage |
| IALA | International Association of Lighthouse Authorities |
| INCSEA | Incident at Sea |
| IPD | Inter-Pupillary Distance |
| ISP | Information Security Program |
| MPL | Multi Purpose Light |
| NAVOSH | Navy Occupational Safety and Health |
| NOD | Night Observation Device |
| NVG | Night Vision Goggles |
| ORM | Operational Risk Management |
| OTC | Officer in Tactical Command |
| PCS | Primary Control Ship |
| POT | Point of Train |
| RF | Radio Frequency |
| SCS | Secondary Control Ship |
| SFW | Spectral Filter Wheel |
| SOP | Standard Operating Procedures |
| SOPA | Senior Officer Present Afloat |
| SSO | Senior Salvage Officer |
| TCO | Traffic Control Officer |
| TUM | Tag-Out User's Manual |

# 100 INTRODUCTION TO FUNDAMENTALS

## 100.1 INTRODUCTION

This PQS begins with a Fundamentals section covering the basic knowledge and principles needed to understand the equipment or duties to be studied. Normally, you would have acquired the knowledge required in the Fundamentals section during the school phase of your training. If you have not been to school or if you need a refresher, the references listed at the beginning of each fundamental will aid you in a self-study program. All references cited for study are selected according to their credibility and availability.

## 100.2 HOW TO COMPLETE

The fundamentals you will have to complete are listed in the watchstation (300 section) for each watchstation. You should complete all required fundamentals before starting the systems and watchstation portions of this PQS, since knowledge gained from fundamentals will aid you in understanding the systems and your watchstation tasks. When you feel you have a complete understanding of one fundamental or more, contact your Qualifier. If you are attempting initial qualification, your Qualifier will expect you to satisfactorily answer all line items in the fundamentals. If you are requalifying or have completed the appropriate schools, your Qualifier may require you to answer representative line items to determine if you have retained the necessary knowledge for your watchstation. If your command requires an oral board or written examination for final qualification, you may be asked any questions from the fundamentals required for your watchstation.

# 101 SAFETY PRECAUTIONS FUNDAMENTALS

References:

[a] OPNAVINST 3500.39A, Operational Risk Management (ORM)
[b] OPNAVINST 5100.19D, Navy Occupational Safety and Health (NAVOSH) Program Manual for Forces Afloat
[c] Standard Operating Procedures (SOP)
[d] NAVEDTRA 14325, Basic Military Requirements
[e] NAVSEA S0404-AD-URM-010/TUM, Tag-Out User's Manual (TUM)

101.1 Discuss the concept of ORM. [ref. a]

_____
(Signature and Date)

.2 Explain the following as they apply to ORM: [ref. a]

a. Identifying hazards
b. Assessing hazards
c. Making risk decisions
d. Implementing controls
e. Supervising

_____
(Signature and Date)

.3 Explain equipment tag-out procedures and the use of danger/caution tags. [ref. e, ch. 1]

_____
(Signature and Date)

.4 Explain the purpose of RF radiation danger tags. [ref. e, ch. 1]

_____
(Signature and Date)

.5 Discuss the hazards of working near radio and radar antennas. [ref. b, ch. C9]

_____
(Signature and Date)

.6 Describe the safety and administrative prerequisite procedures for going aloft. [ref. b, ch. C8]

_____
(Signature and Date)

## 101 SAFETY PRECAUTIONS FUNDAMENTALS (CONT'D)

101.7 Describe the safety and administrative prerequisite procedures for working over the side. [ref. b, ch. C8]

_____
(Signature and Date)

.8 Discuss the hazards associated with flight operations including: [ref. b, chs. C7, C12]

a. FOD
b. Noise

_____
(Signature and Date)

.9 Discuss the hazards associated with use of flags/day shapes when high wind conditions exist. [ref. b, ch. C16]

_____
(Signature and Date)

.10 Describe the four classes of fire and the firefighting techniques for each. [ref. d, ch. 17]

_____
(Signature and Date)

.11 Discuss the electrical safety precautions to be taken when working with energized electrical equipment. [ref. b, chs. B7, C9]

_____
(Signature and Date)

.12 Discuss basic first aid treatment procedures for electrical shock and burns. [ref. b, ch. C9]

_____
(Signature and Date)

.13 Describe immediate actions to be taken by signal bridge watch personnel during a man overboard situation. [ref. c]

_____
(Signature and Date)

# 102 SECURITY FUNDAMENTALS

References:

[a] NAVEDTRA 14244, Signalman 3&2
[b] SECNAVINST 5510.36, Department of the Navy (DON), Information Security Program (ISP) Regulation
[c] Ship's EMCON Bill
[d] Bluejackets Manual, 22nd Edition

102.1 Define the following terms in regard to security:

a. Access [ref. a, ch. 11]
b. Classification [ref. a, ch. 11]
c. Classification guide [ref. a, ch. 11]
d. Classified information [ref. a, ch. 11]
e. Clearance [ref. a, ch. 11]
f. COMSEC [ref. b, ch. 9]
g. Compromise [ref. a, ch. 11]
h. Custodian [ref. d, ch. 13]
i. Declassification [ref. a, ch. 11]
j. Downgrading [ref. a, ch. 11]
k. Emergency Action Plan [ref. b, ch. 2]
l. Marking [ref. a, ch. 11]
m. Need to know [ref. a, ch. 11]
n. NOFORN [ref. b, ch. 6]
o. OPSEC [ref. d, ch. 7]
p. Original classification [ref. b, ch. 4]
q. Restricted data [ref. b, ch. 1]
r. Safeguarding [ref. a, ch. 11]
s. Security [ref. a, ch. 11]
t. Security violation [ref. a, ch. 11]
u. Storage [ref. a, ch. 11]

_____
(Signature and Date)

.2 Define the following security classification and administrative provisions: [ref. a, ch. 11]

a. Confidential
b. Secret
c. Top secret

_____
(Signature and Date)

## 102 SECURITY FUNDAMENTALS (CONT'D)

102.3 State your personal responsibilities for safeguarding information. [ref. a, ch. 11]

_____
(Signature and Date)

.4 Explain your responsibilities in the event of a compromise or a suspected compromise. [ref. a, ch. 11]

_____
(Signature and Date)

.5 State who can authorize reproduction of the following material: [ref. b, ch. 9]

a. Confidential
b. Secret
c. Top secret

_____
(Signature and Date)

.6 Describe the requirements for handling classified material. [ref. b, ch. 9]

_____
(Signature and Date)

.7 Explain the following requirements for destruction of classified material: [ref. a, ch. 11]

a. Water depth greater than 1,000 fathoms
b. Water depth less than 1,000 fathoms
c. Destruction equipment
d. Methods
e. Priorities of destruction
f. Reporting

_____
(Signature and Date)

.8 Explain imposed visual silence. [ref. c]

_____
(Signature and Date)

.9 Explain the purpose and contents of the EAP. [ref. b, ch. 2]

_____
(Signature and Date)

## 103 LOOKOUT FUNDAMENTALS

References:

[a] NAVEDTRA 14325, Basic Military Requirements
[b] NAVEDTRA 12968-A, Lookout Training Handbook
[c] ATP 1(C), Allied Maritime Tactical Signal and Maneuvering Book, Vol. II
[d] COMDTINST M16672.2D, Navigation Rules, International - Inland
[e] Bluejackets' Manual, 22nd Edition

103.1 Explain the importance of a lookout. [ref. b]

_____
(Signature and Date)

.2 Describe the objects and sounds a lookout should report and when they should be reported. [ref. b]

_____
(Signature and Date)

.3 Discuss objects a lookout can detect but radar cannot. [ref. b]

_____
(Signature and Date)

.4 Describe/explain the following as applied to the normal peacetime lookout organization on your ship:

a. The sector each man is assigned to watch [ref. b]
b. The special responsibility of the after lookout concerning man overboard [ref. a, ch. 21; ref. b]
c. When the restricted-visibility lookouts are posted [ref. b]
d. The responsibilities of each man at restricted-visibility lookout station [ref. b]
e. The sequence of a standard Low Visibility Lookout Report [ref. b]

_____
(Signature and Date)

.5 Explain the effects of dark adaptation on lookout's vision. [ref. a, ch. 21; ref. b]

_____
(Signature and Date)

## 103 LOOKOUT FUNDAMENTALS (CONT'D)

103.6 Explain offcenter vision and how it may be used to see objects at night. [ref. b]

_____
(Signature and Date)

.7 Explain the most effective method of moving the eyes at night to detect objects. [ref. b]

_____
(Signature and Date)

.8 Explain the situations where binoculars are/are not more effective than the use of eyes alone. [ref. b]

_____
(Signature and Date)

.9 Explain how binoculars limit the field of vision. [ref. b]

_____
(Signature and Date)

.10 Explain how to focus binoculars. [ref. b]

_____
(Signature and Date)

.11 Explain how to determine your IPD. [ref. b]

_____
(Signature and Date)

.12 Explain the importance of always wearing binoculars around the neck. [ref. b]

_____
(Signature and Date)

.13 Explain the correct procedure for cleaning binoculars. [ref. b]

_____
(Signature and Date)

.14 State what the lookout's technique of eye search is called. [ref. b]

_____
(Signature and Date)

## 103 LOOKOUT FUNDAMENTALS (CONT'D)

103.15 Explain how the lookout uses his eyes and binoculars for scanning. [ref. b]

_____
(Signature and Date)

.16 Discuss the way a lookout searches from the horizon to zenith. [ref. b]

_____
(Signature and Date)

.17 Discuss the effects of temporary flash blindness and permanent retinal burns from a nuclear blast. [ref. a, ch. 16]

_____
(Signature and Date)

.18 Discuss the procedures for lookouts during a nuclear burst to mitigate flash blindness and avoid retinal burns. [ref. a, ch. 16]

_____
(Signature and Date)

.19 Explain the six parts of an initial report: [ref. b]

a. What you see
b. Bearing
c. Range
d. Target angle
e. Position angle
f. Movement (bearing drift)

_____
(Signature and Date)

.20 Explain the relationship between true and relative bearing. [ref. b]

_____
(Signature and Date)

.21 Explain how bearings are reported and pronounced in digits. [ref. b]

_____
(Signature and Date)

## 103 LOOKOUT FUNDAMENTALS (CONT'D)

103.22 Explain the following terms: [ref. b]

a. Dead ahead
b. Starboard bow
c. Starboard beam
d. Starboard quarter
e. Port bow
f. Port beam
g. Port quarter
h. Dead astern

_____
(Signature and Date)

.23 Explain the following as applied to reports: [ref. b]

a. How the position of a sky object is described
b. Position angle and the minimum and maximum position angles
c. How position angles are spoken
d. The difficulty in estimating ranges over water
e. Why and how a lookout should practice estimating ranges
f. How ranges are reported and spoken

_____
(Signature and Date)

.24 State the distance you can expect to see from your ship's post to the horizon on a clear day. [ref. b]

_____
(Signature and Date)

.25 Define the following: [ref. b]

a. Hull up
b. Hull down
c. On the horizon

_____
(Signature and Date)

.26 Discuss why target angle is important to the OOD. [ref. b]

_____
(Signature and Date)

## 103 LOOKOUT FUNDAMENTALS (CONT'D)

103.27 Describe the identifying characteristics of the following types of ships: [ref. b]

a. Combatants
b. Auxiliaries/merchants

_____
(Signature and Date)

.28 Describe the identifying characteristics of the following types of aircraft: [ref. a, ch. 12]

a. Propeller
b. Jet
c. Helo

_____
(Signature and Date)

.29 State the meaning of the following special signal flags: [ref. c, ch. 2]

a. Bravo
b. Foxtrot
c. Golf
d. Hotel
e. Lima
f. November
g. Oscar
h. Prep
i. Romeo
j. Five

_____
(Signature and Date)

.30 Discuss the use of the following items in the recovery of a man overboard: [ref. b]

a. Life ring/buoy
b. Smoke float
c. Strobe light
d. Searchlights
e. Flares

_____
(Signature and Date)

## 103 LOOKOUT FUNDAMENTALS (CONT'D)

103.31 Describe when the following man overboard recovery procedures are used: [ref. a, ch. 19]

a. Helicopter
b. Boat
c. Shipboard

_____
(Signature and Date)

.32 Discuss the responsibilities of all lookouts during a man overboard condition. [ref. b]

_____
(Signature and Date)

.33 State what the following methods of visual communication are:

a. Flaghoist [ref. e, ch. 21]
b. Flashing light (directional, non-directional) [ref. e, ch. 21]
c. Infrared (Nancy) [ref. e, ch. 21]
d. Semaphore [ref. e, ch. 21]
e. Flares [ref. b]

_____
(Signature and Date)

.34 State the day shapes and fog signals for the following vessels: [ref. d]

a. Power-driven vessel under way with way on [Rules 23, 35]
b. Power-driven vessel under way with no way on [Rules 23, 35]
c. Vessel not under command [Rules 27, 35]
d. Vessel restricted in ability to maneuver [Rules 27, 35]
e. Vessel constrained by draft [Rules 28, 35]
f. Sailing vessel [Rules 25, 35]
g. Fishing vessel [Rules 26, 35]
h. Vessel engaged in towing or pushing ahead [Rules 24, 35]
i. Vessel being towed, if manned [Rules 24, 35]
j. Vessel at anchor (less than 100 meters) [Rules 30, 35]
k. Vessel at anchor (100 meters or larger) [Rules 30, 35]
l. Vessel aground [Rules 30, 35]
m. Pilot vessel [Rules 29, 35]

_____
(Signature and Date)

## 103 LOOKOUT FUNDAMENTALS (CONT'D)

103.35 Discuss the importance of location between a bell and gong in low visibility, and how they are used. [ref. d, Rule 35]

_____
(Signature and Date)

.36 Define the following: [ref. d, Rule 32]

a Prolonged blast
b. Short blast

_____
(Signature and Date)

.37 Discuss the types of sound signals generated by own ship. [ref. b]

_____
(Signature and Date)

.38 Discuss the location, color range, and arc of visibility of the following shipboard navigation lights: [ref. d, Rules 21, 22]

a. After masthead
b. Forward masthead
c. Port running
d. Starboard running
e. Stern
f. Not under command
g. Restricted in ability to maneuver
h. Forward and aft anchor lights

_____
(Signature and Date)

.39 Define the following situations: [ref. d]

a. Head-on (meeting) [Rule 14]
b. Crossing [Rule 15]
c. Overtaking [Rule 13]

_____
(Signature and Date)

.40 Discuss how visual contact information is accumulated in CIC and the bridge. [ref. b]

_____
(Signature and Date)

## 103 LOOKOUT FUNDAMENTALS (CONT'D)

103.41 Describe how visual information is correlated with radar contact information in CIC. [ref. b]

_____

(Signature and Date)

## 104 EXPERT LOOKOUT FUNDAMENTALS

References:

[a] Jane's Fighting Ships
[b] Jane's All The World's Aircraft
[c] NAVEDTRA 14244, Signalman 3&2

104.1 Describe and discuss the visual characteristics of the following U.S. Navy vessels/aircraft by class:

a. Carrier [ref. a]
b. Cruiser [ref. a]
c. Destroyer [ref. a]
d. Frigate [ref. a]
e. Submarine [ref. a]
f. Fast patrol boat [ref. a]
g. Patrol/reconnaissance aircraft [ref. b]
h. Bomber aircraft [ref. b]
i. Fighter aircraft [ref. b]
j. Attack aircraft [ref. b]
k. Helicopter [ref. b]
l. Amphibious ships [ref. a]

_____
(Signature and Date)

.2 Describe and discuss the visual characteristics of the following foreign naval vessels/aircraft by class:

a. Carrier [ref. a]
b. Cruiser [ref. a]
c. Destroyer [ref. a]
d. Frigate [ref. a]
e. Submarine [ref. a]
f. Fast patrol boat [ref. a]
g. Patrol/reconnaissance aircraft [ref. b]
h. Bomber aircraft [ref. b]
i. Fighter aircraft [ref. b]
j. Attack aircraft [ref. b]
k. Helicopter [ref. b]
l. Amphibious ships [ref. a]

_____
(Signature and Date)

## 104 EXPERT LOOKOUT FUNDAMENTALS (CONT'D)

104.3 State the primary mission of each of the following vessel/ aircraft:

a. Carrier [ref. a]
b. Cruiser [ref. a]
c. Destroyer [ref. a]
d. Frigate [ref. a]
e. Submarine [ref. a]
f. Fast patrol boat [ref. a]
g. Patrol/reconnaissance aircraft [ref. b]
h. Bomber aircraft [ref. b]
i. Fighter aircraft [ref. b]
j. Attack aircraft [ref. b]
k. Helicopter [ref. b]
l. Amphibious ships [ref. a]

_____
(Signature and Date)

.4 Discuss the primary threat to your ship posed by the following vessels/aircraft:

a. Carrier [ref. a]
b. Cruiser [ref. a]
c. Destroyer [ref. a]
d. Frigate [ref. a]
e. Submarine [ref. a]
f. Fast patrol boat [ref. a]
g. Patrol/reconnaissance aircraft [ref. b]
h. Bomber aircraft [ref. b]
i. Fighter aircraft [ref. b]
j. Attack aircraft [ref. b]
k. Helicopter [ref. b]
l. Amphibious ships [ref. a]

_____
(Signature and Date)

.5 Discuss the following terms as they relate to merchant vessels: [ref. c, ch. 13]

a. Superstructure group
b. Basic hull designs
c. Upright sequence (rigging)

_____
(Signature and Date)

## 105 VISUAL MESSAGE FORMAT FUNDAMENTALS

References:

[a] NTP 4(D) Fleet Communications
[b] ACP 130, Communication Instructions, Signaling Procedures in the Visual Medium
[c] Standard Operating Procedures (SOP)
[d] NAVEDTRA 14244, Signalman 3&2

105.1 State and explain the parts of a naval message. [ref. d, ch. 3]

_____
(Signature and Date)

.2 Explain how a DTG/file time is assigned to a message. [ref. d, ch. 3]

_____
(Signature and Date)

.3 Explain the reason for assigning precedence. [ref. a, ch. 4]

_____
(Signature and Date)

.4 Explain the reason for assigning a group count to a message. [ref. b, ch. 4]

_____
(Signature and Date)

.5 Explain the rules for counting groups. [ref. b, ch. 4]

_____
(Signature and Date)

.6 Describe the internal routing procedures for incoming and outgoing visual messages. [ref. c]

_____
(Signature and Date)

.7 Explain the meaning of overscore. [ref. d, ch. 3]

_____
(Signature and Date)

## 105 VISUAL MESSAGE FORMAT FUNDAMENTALS (CONT'D)

105.8 State and define all prosigns. [ref. b, ch. 3]

_____
(Signature and Date)

.9 Explain the use of service blocks at the bottom of a standard visual message. [ref. a, ch. 8]

_____
(Signature and Date)

.10 Describe the lettering system used when recording a message. [ref. d, ch. 1]

_____
(Signature and Date)

.11 Define plaindress, abbreviated plaindress, and codress message forms. [ref. b, ch. 4]

_____
(Signature and Date)

.12 Describe the following types of messages: [ref. b, ch. 4]

a. Service
b. Abbreviated service

_____
(Signature and Date)

.13 State and explain the reason for and use of a service message. [ref. d, ch. 3]

_____
(Signature and Date)

# 106 SIGNAL FLAGS FUNDAMENTALS

References:

[a] NAVEDTRA 14244, Signalman 3&2

106.1 Explain the use of the following:

a. Belaying pins [ch. 5]
b. Blocks [ch. 5]
c. Downhaul [ch. 5]
d. Fife rail [ch. 5]
e. Fingers [ch. 2]
f. Flag bag [ch. 2]
g. Gaff [ch. 5]
h. Halyards [ch. 5]
i. Mast [ch. 5]
j. Retriever [ch. 5]
k. Rings [ch. 2]
l. Signal flags [ch. 5]
m. Snap hooks [ch. 2]
n. Tack line [ch. 5]
o. Tail line [ch. 5]
p. Triatic stay [ch. 5]
q. Truck [ch. 10]
r. Uphaul [ch. 5]
s. Yardarms [ch. 5]

_____
(Signature and Date)

.2 Discuss and identify flags/pennants contained in a allied/international flag bag. [ch. 5]

_____
(Signature and Date)

.3 Define the following terms: [ch. 2]

a. Fly
b. Hoist
c. Tabling
d. Tail line

_____
(Signature and Date)

## 107 FLAGHOIST FUNDAMENTALS

References:

[a] ATP 1(C), Allied Maritime Tactical Signal and Maneuvering Book, Vol. II
[b] ACP 130, Communication Instructions, Signaling Procedures in the Visual Medium
[c] NTP 4(D), Fleet Communications
[d] PUB 102, International Code of Signals
[e] Standard Operating Procedures (SOP)
[f] NAVEDTRA 14244, Signalman 3&2

107.1 Explain the meanings of single flags and pennants and which must be answered/repeated. [ref. a, ch. 2]

_____
(Signature and Date)

.2 Explain the meaning of the following terms: [ref. a, ch. 8; ref. b, ch. 5]

a. At the dip
b. Closeup
c. End of signal
d. Going up
e. Haul down
f. Stand by your bags

_____
(Signature and Date)

.3 Explain the terminology used when passing flaghoist signal to bridge and CIC. [ref. f, ch. 5]

_____
(Signature and Date)

.4 Explain how a flaghoist signal is answered by the following procedures: [ref. f]

a. Allied [ch. 5]
b. International [ch. 6]

_____
(Signature and Date)

## 107 FLAGHOIST FUNDAMENTALS (CONT'D)

107.5 Describe action taken using standard U.S. Navy and allied procedures when: [ref. c, ch. 8]

a Signal now flying not distinguishable
b. You are repeating signal incorrectly
c. I am repeating signal incorrectly
d. Questioning one signal of a multiple signal display (USN only)

_____
(Signature and Date)

.6 Describe action taken using standard international procedures when: [ref. d, ch. 2]

a. I cannot distinguish your signal
b. Your signal has been received but not understood
c. My last was incorrect I will repeat it correctly
d. Your signal appears incorrectly coded, you should check and repeat the whole

_____
(Signature and Date)

.7 Explain the procedures for canceling the following:

a. Single hoist [ref. e]
b. Display [ref. e]
c. Hoist governed by a time signal [ref. a, ch. 1]
d. Hoist preceded by call sign [ref. a, ch. 1]
e. By international procedures [ref. b, ch. 8; ref. d, ch. 2]

_____
(Signature and Date)

.8 Explain the procedures for correcting a flaghoist signal. [ref. b, ch. 8]

_____
(Signature and Date)

.9 Explain the order in which flaghoist signals are to be read. [ref. b, ch. 8]

_____
(Signature and Date)

.10 Explain the procedure for communicating with merchant vessels by flaghoist. [ref. f, ch. 6]

_____
(Signature and Date)

## 107 FLAGHOIST FUNDAMENTALS (CONT'D)

107.11 Define the meanings of superior and inferior as applied to hoisting flag signals. [ref. a, ch. 1]

_____
(Signature and Date)

.12 Define the following governing pennants and explain how they differ in governing with a tack or without a tack: [ref. a, ch. 1]

a. PREP
b. Interrogative
c. Negative

_____
(Signature and Date)

.13 Define all governing groups and explain how they are used. [ref. a, ch. 1]

_____
(Signature and Date)

.14 Explain the procedure for relaying flaghoist signals to include: [ref. f, ch. 5]

a. All ship signals originated by OTC
b. Signals originated by ship addressing the OTC or other units
c. Emergency alarm signals addressed to the OTC

_____
(Signature and Date)

.15 Describe the procedures for constructing special task organization call signs using flag and pennant combinations. [ref. b, ch. 2]

_____
(Signature and Date)

.16 Explain the use of substitutes as per allied/international flaghoist procedures. [ref. d, ch. 1; ref. f, ch. 5]

_____
(Signature and Date)

.17 Describe procedures for signaling approach, alongside, breakaway, and emergency breakaway from underway replenishment unit. [ref. a, ch. 30]

_____
(Signature and Date)

## 107 FLAGHOIST FUNDAMENTALS (CONT'D)

107.18 Explain the procedures for encoding signals. [ref. a, ch. 1]

_____
(Signature and Date)

.19 Explain the procedures for completing a signal where a "_____" or "as indicated" appears in the meaning of a signal. [ref. a, ch. 1]

_____
(Signature and Date)

.20 Explain the procedures for completing a signal where a "(_____)" or "(as indicated)" appears in the meaning of a signal. [ref. a, ch. 1]

_____
(Signature and Date)

.21 Define chapter group, basic group, and suffixes. [ref. a, ch. 1]

_____
(Signature and Date)

.22 Explain the procedures for encoding/decoding sequence of data. [ref. a, ch. 1]

_____
(Signature and Date)

.23 Describe time signals for the following situations: [ref. a, ch. 1]

a. To commence at
b. To be completed by
c. To commence at and be completed by

_____
(Signature and Date)

.24 Describe the procedures and when they are used to answer information signals contained in ATP-1, vol. II, chs. 4-9. [ref. a, ch. 1]

_____
(Signature and Date)

.25 Describe the use of plain text/descriptive signals. [ref. a, ch. 1]

_____
(Signature and Date)

## 107 FLAGHOIST FUNDAMENTALS (CONT'D)

107.26 Describe procedures for any signals preceded by emergency. [ref. a, ch. 3]

_____
(Signature and Date)

.27 State position, utilizing latitude/longitude. [ref. a, ch. 1]

_____
(Signature and Date)

.28 Explain signals for denoting sectors. [ref. a, ch. 1]

_____
(Signature and Date)

.29 Explain signaling using bearing, distance, and direction. [ref. a, ch. 1]

_____
(Signature and Date)

.30 Discuss the application of the use of units of reference. [ref. a, ch. 1]

_____
(Signature and Date)

.31 Discuss the use of the answer pennant in relation to units of reference. [ref. a, ch. 1]

_____
(Signature and Date)

.32 Describe the action to be taken when using international signals in conjunction with ATP- 1, vol. II. [ref. a, ch. 1]

_____
(Signature and Date)

.33 Describe the procedure for transmitting signals by visual means other than flaghoist. [ref. a, ch. 1]

_____
(Signature and Date)

.34 Explain how call signs in the text of signals are used to amplify the meaning of a signal. [ref. a, ch. 1]

_____
(Signature and Date)

## 107 FLAGHOIST FUNDAMENTALS (CONT'D)

107.35 Explain the procedures for signaling when using the INCSEA agreement. [ref. c, ch. 8]

_____
(Signature and Date)

.36 Explain the use of single letter signals with complements from Pub. 102. [ref. d, ch. 1]

_____
(Signature and Date)

# 108 CALL SIGNS FUNDAMENTALS

References:

[a] ACP 130, Communication Instructions, Signaling Procedures in the Visual Medium
[b] NAVEDTRA 14244, Signalman 3&2
[c] NTP 4(D), Fleet Communications

108.1 Define the following: [ref. a, ch. 2]

a. Address group
b. International call signs
c. Visual call signs

_____
(Signature and Date)

.2 Discuss usage of visual call signs. [ref. a, ch. 2]

_____
(Signature and Date)

.3 Discuss restriction in visual call sign usage. [ref. a, ch. 2]

_____
(Signature and Date)

.4 State the call signs other than visual that can be used in visual communications. [ref. a, ch. 2]

_____
(Signature and Date)

.5 State the publications used in locating/constructing visual call signs. [ref. b, ch. 3]

_____
(Signature and Date)

.6 Identify convoy call signs. [ref. b, ch. 7]

_____
(Signature and Date)

.7 Discuss single-letter-type indicators. [ref. b, ch. 3]

_____
(Signature and Date)

## 108 CALL SIGNS FUNDAMENTALS (CONT'D)

108.8 Describe how unit indicators are used to form commander/collective call signs. [ref. a, ch. 2]

_____
(Signature and Date)

.9 Discuss special task organization call signs. [ref. a, ch. 2]

_____
(Signature and Date)

.10 Describe effective boat calls. [ref. b, ch. 3]

_____
(Signature and Date)

.11 Define and discuss pennant call signs. [ref. a, ch. 2]

_____
(Signature and Date)

.12 Define and discuss the use of visual call sign p9p9. [ref. c, ch. 8]

_____
(Signature and Date)

.13 Describe the procedures for modifying numerical pennant call signs with p0, type indicators, and/or unit indicators. [ref. a, ch. 2]

_____
(Signature and Date)

.14 Describe sending numeral flags and pennants by flashing light. [ref. a, ch. 2]

_____
(Signature and Date)

## 109 FLASHING LIGHT PROCEDURES FUNDAMENTALS

References:

[a] ACP 130, Communication Instructions, Signaling Procedures in the Visual Medium
[b] NAVEDTRA 14244, Signalman 3&2
[c] NTP 4(D), Fleet Communications
[d] ACP 131(E), Communications Instructions, Operating Signals
[e] PUB 102, International Code of Signals
[f] ATP 1(C), Allied Maritime Tactical Signal and Maneuvering Book, Vol. II

109.1 Describe all Morse code characters by sight patterns. [ref. a, ch. 1; ref. b, app. 2]

_____
(Signature and Date)

.2 Define flashing light procedures for the following:

a. Directional [ref. a, ch. 6]
b. Non-directional [ref. a, ch. 6]
c. Infrared [ref. b, ch. 4]

_____
(Signature and Date)

.3 Discuss international flashing light procedures as applied to allied and merchant vessels. [ref. b, ch. 6]

_____
(Signature and Date)

.4 Describe the procedures for communicating with aircraft using a flashing light and pyrotechnics. [ref. a, ch. 6; ref. b, ch. 4; ref. c, ch. 8; ref. e, ch. 1]

_____
(Signature and Date)

.5 Explain the meaning and use of all prosigns. [ref. a, ch. 3]

_____
(Signature and Date)

.6 Discuss visual communication requirements with life boat and ships in company during man overboard evolutions. [ref. c, ch. 8; ref. f, ch. 2]

_____
(Signature and Date)

## 109 FLASHING LIGHTS PROCEDURES FUNDAMENTALS (CONT'D)

109.7 Explain the procedure for checking a group count before and after a receipt. [ref. a, ch. 4]

_____
(Signature and Date)

.8 Describe the restrictions associated with visual signaling during flight operations. [ref. c, ch. 8]

_____
(Signature and Date)

.9 Explain the meaning of double-flash procedure. [ref. a, ch. 6]

_____
(Signature and Date)

.10 Discuss the basic rules, transmission discipline, and security requirements for a flashing light operator. [ref. a, ch. 1]

_____
(Signature and Date)

.11 Discuss call serving as address. [ref. a, ch. 6]

_____
(Signature and Date)

.12 Discuss full and abbreviated call-ups. [ref. a, ch. 6]

_____
(Signature and Date)

.13 Discuss visual relay responsibilities. [ref. a, ch. 5]

_____
(Signature and Date)

.14 Discuss delayed executive method and immediate executive method messages. [ref. a, ch. 6]

_____
(Signature and Date)

## 109 FLASHING LIGHTS PROCEDURES FUNDAMENTALS (CONT'D)

109.15 Discuss obtaining repetitions: [ref. a, ch. 4]

a. For heading
b. For text
c. For codress
d. After receipt of message

_____
(Signature and Date)

.16 Discuss transmitting the precedence indicated in the preliminary call-up. [ref. a, ch. 4]

_____
(Signature and Date)

.17 Explain the use and differences between military and nonmilitary operating signals. [ref. b, ch. 4; ref. d, ch. 1]

_____
(Signature and Date)

.18 Define the following common operating signals: [ref. d, ch. 2]

a. QRD
b. QRQ
c. QRS
d. QRU
e. ZEU
f. ZFH1
g. ZFH2
h. ZJJ
i. ZJL
j. ZUG
k. ZUI
l. ZWC
m. ZWL
n. ZUE

_____
(Signature and Date)

# 110 SEMAPHORE PROCEDURES FUNDAMENTALS

References:

[a] ACP 130, Communication Instructions, Signaling Procedures in the Visual Medium

110.1 Describe all semaphore positions. [ch. 1, app. II]

_____
(Signature and Date)

.2 Explain the following special semaphore characters: [chs. 1, 7]

a. Answering sign
b. Attention sign
c. Direction sign
d. Error sign
e. Front sign
f. Numerals sign
g. Separative sign

_____
(Signature and Date)

.3 Explain the following special semaphore abbreviations: [ch. 7]

a. MD
b. ML
c. MR
d. MU
e. SEM

_____
(Signature and Date)

.4 Explain the calls for a semaphore message using the following methods: [ch. 7]

a. Flashing light
b. Flaghoist
c. Semaphore

_____
(Signature and Date)

## 110 SEMAPHORE PROCEDURES FUNDAMENTALS (CONT'D)

110.5 Explain how to answer a semaphore message using the following: [ch. 7]

a. Flashing light
b. Flaghoist
c. Semaphore

_____
(Signature and Date)

.6 Explain how to receipt a semaphore message using the following: [ch. 7]

a. Flashing light
b. Flaghoist
c. Semaphore

_____
(Signature and Date)

.7 Discuss procedures for interruptions in transmission of reception of a semaphore message using: [ch. 7]

a. Flashing light
b. Flaghoist
c. Semaphore

_____
(Signature and Date)

.8 Explain the procedures for corrections, repetitions, and cancellations. [ch. 4]

_____
(Signature and Date)

# 111 IN-PORT DUTY SIGNALMAN FUNDAMENTALS

References:

[a] NAVEDTRA 14244, Signalman 3&2
[b] OPNAVINST 3120.32C, Standard Organization and Regulations of the U.S. Navy (SORM)
[c] NTP 4(D), Fleet Communications, Ch. 8
[d] NTP 13(B), Flags, Pennants and Customs
[e] ATP 1(C), Allied Maritime Tactical Signal and Maneuvering Book, ATP 1(C), Vol. II
[f] Standard Operating Procedures (SOP)

111.1 Discuss the following duties as applied to duty in-port signalmen:

a. Execute sunrise and colors [ref. a, ch. 7; ref. e, ch. 1]
b. Selection of proper ensigns to use during the following evolutions:
    1. Daily colors [ref. d, ch. 5]
    2. Holiday colors [ref. d, ch. 5]
    3. Underway [ref. d, ch. 5]
    4. Dress ship [ref. d, ch. 6]
    5. Full dress ship [ref. d, ch. 6]
c. Proper hoisting of ensigns [ref. d, ch. 3]
d. Rescue and assistance signalman [ref. b, ch. 6]
e. Maintaining visual log and files [ref. c, ch. 8]
f. Maintaining watch-to-watch inventory [ref. c, ch. 5]
g. Making preparations for getting under way [ref. f]
h. Reporting ships' movements [ref. a, ch. 7]
i. Reviewing instructions for special events [ref. f]
j. Repairing bunting [ref. a, ch. 2]
k. Reeve and splice halyards [ref. a, ch. 2]

_____
(Signature and Date)

# 112 LOGS, FILES, AND PUBLICATIONS FUNDAMENTALS

References:

[a] NTP 4(D), Fleet Communications
[b] NAVEDTRA 14244, Signalman 3&2

112.1 Describe the following as applied to visual communications:

a. Watch-to-watch publication inventory [ref. a, ch. 5; ref. b, ch. 8]
b. Visual log [ref. a, ch. 8; ref. b, ch. 8]
c. Visual signal station files [ref. b, ch. 8]
d. Communications center file [ref. a, ch. 4]
e. Tickler file [ref. b, ch. 1]
f. Filler or dummy message [ref. a, ch. 8; ref. b, ch. 8]

_____
(Signature and Date)

.2 Describe the basic contents of the following: [ref. a, ch. 8]

a. Visual log
b. Service cross

_____
(Signature and Date)

.3 Describe and explain the destruction/retainment requirements of the following: [ref. b, ch. 8]

a. Watch-to-watch publication inventory
b. Visual log
c. Visual signal station files

_____
(Signature and Date)

.4 Describe how to log the following: [ref. a, ch. 8]

a. Re-addressals
b. Service cross
c. Substitutes
d. Immediate executive method
e. Delayed executive method

_____
(Signature and Date)

## 112 LOGS, FILES, AND PUBLICATIONS FUNDAMENTALS (CONT'D)

112.5 Describe how publication correction messages are numbered. [ref. a, ch. 1]

_____
(Signature and Date)

.6 Define the following terms: [ref. a, ch. 1]

a. Pen and ink
b. Cutout
c. Flap
d. Letter of promulgation
e. List of effective pages
f. Page check
g. Change
h. Correction

_____
(Signature and Date)

.7 Describe and state visual log transmission abbreviations. [ref. a, ch. 8]

_____
(Signature and Date)

## 113 NAVIGATION FUNDAMENTALS

References:

[a] COMDTINST M16672.2D, Navigation Rules, International - Inland
[b] NSTM S9086-N2-STM-010/CH-422R3/CH-422, Navigation and Signal Lights
[c] NAVEDTRA 14244, Signalman 3&2

113.1 Describe the location and purpose of the following lights:

a. Aft masthead [ref. a, Rule 21]
b. Aircraft warning [ref. b]
c. Anchor [ref. a, Rule 21]
d. Blinker [ref. b]
e. Blue stern [ref. b]
f. Not under command [ref. a, Rule 27]
g. Contour [ref. b]
h. Man overboard [ref. b]
i. Masthead [ref. a, Rule 21]
j. Side [ref. a, Rule 21]
k. Stern [ref. a, Rule 21]
l. Task [ref. b]
m. Wake [ref. b]

_____
(Signature and Date)

.2 State the rules regarding the display of international/ inland navigation lights during the following situations: [ref. a]

a. Aircraft launch/recovery [Rule 27]
b. Dredging, surveying or underwater operations [Rule 27]
c. Engaged in fishing [Rule 26]
d. Engaged in minesweeping [Rule 27]
e. Engaged in pilotage duty [Rule 29]
f. Engaged in trawling [Rule 26]
g. Pushing [Rule 24]
h. Restricted in ability to maneuver [Rule 27]
i. Towing [Rule 24]
j. Underway replenishment [Rule 27]
k. Vessel at anchor or aground [Rule 20]
l. Vessel constrained by draft [Rule 28]
m. Vessel 50 meters in length or greater [Rule 23]
n. Vessel less than 50 meters in length [Rule 23]
o. Vessel not under command [Rule 27]

_____
(Signature and Date)

## 113 NAVIGATION FUNDAMENTALS (CONT'D)

113.3 Describe the international/inland day shapes displayed for the following situations: [ref. a]

a. Aground [Rule 20]
b. At anchor [Rule 20]
c. Dredging [Rule 27]
d. Engaged in fishing
e. Minesweeping [Rule 27]
f. Not under command [Rule 27]
g. Restricted maneuverability [Rule 27]
h. Towing [Rule 24]
i. Vessel constrained by draft (international rules only) [Rule 28]

_____
(Signature and Date)

.4 State the different methods of producing sound signals. [ref. a, Rule 33]

_____
(Signature and Date)

.5 Define short blast and prolong blast on the ship's whistle. [ref. a, Rule 32]

_____
(Signature and Date)

.6 Describe the international/inland sound signals during restricted visibility for the following situations: [ref. a, Rule 35]

a. Aground (less than 50 meters/50 meters or more)
b. At anchor (less than 100 meters/100 meters or more)
c. Being towed
d. Engaged in fishing or trawling
e. Not under command
f. Pilotage duty
g. Towing (less than 200 meters/200 meters or more)
h. Under way
i. Under way (way on)

_____
(Signature and Date)

## 113 NAVIGATION FUNDAMENTALS (CONT'D)

113.7 Discuss the sound signals for maneuvering: [ref. a, Rule 34]

a. Inland waters
b. International narrow channel
c. International waters

_____
(Signature and Date)

.8 Define the following terms as applied to buoys/light characteristics: [ref. c, ch. 9]

a. Isophase (equal interval)
b. Fixed
c. Flashing
d. Group flashing
e. Group occulting
f. Interrupted quick flashing
g. Occulting
h. Quick flashing

_____
(Signature and Date)

.9 Describe the IALA system of buoyage (Region A/ Region B). [ref. c, ch. 9]

_____
(Signature and Date)

.10 Describe the following buoys by day and by night identification: [ref. c, ch. 9]

a. Isolated danger
b. Mid-channel
c. Port/starboard buoys
d. Preferred channel
e. Special purpose

_____
(Signature and Date)

## 114 HONORS AND CEREMONIES FUNDAMENTALS

References:

[a] NTP 13 (B), Naval Telecommunications Procedures, Flags, Pennant, and Customs
[b] United States Navy Regulations, 1990
[c] Bluejackets Manual, 22nd Edition

114.1 Describe procedures for shifting colors. [ref. a, ch. 3]

_____
(Signature and Date)

.2 Explain the use of the church/Jewish worship pennants. [ref. a, ch. 17]

_____
(Signature and Date)

.3 State the procedures for accomplishing the following honors and ceremonies:

a. Boat hails [ref. a, ch. 10]
b. Dipping ensign [ref. a, ch. 3]
c. Dress ship [ref. a, ch. 6]
d. Full dress ship [ref. a, ch. 6]
e. Half-masting the ensign [ref. a, ch. 3]
f. Official visit [ref. b, ch. 12
g. Formal visits other than official visits [ref. b, ch. 12]
h. Passing honors [ref. b, ch. 12]
i. Passing the word and use of boat gongs [ref. a, ch. 12]
j. Use of speed flag [ref. a, ch. 9]

_____
(Signature and Date)

.4 Discuss passing honors rendered to officers/officials embarked in ships and boats. [ref. a, ch. 12]

_____
(Signature and Date)

## 114 HONORS AND CEREMONIES FUNDAMENTALS (CONT'D)

114.5 State the rules of display for the following under normal conditions and conditions of full dress ship: [ref. a]

a. Foreign ensigns [ch. 6]
b. National ensign [ch. 6]
c. Personal flags and pennants of U.S. military officers and civilian officials [ch. 6]
d. United Nations flag [Annex B]
e. Union Jack [ch. 5]

_____
(Signature and Date)

.6 Define the distinctive mark of a ship. [ref. a, ch. 9]

_____
(Signature and Date)

.7 Discuss the display of boat ensigns. [ref. a, ch. 5]

_____
(Signature and Date)

.8 Discuss hoe to identify the grade of an officer embarked in a boat using flagstaff insignia: [ref. a, ch. 11]

a. Spread eagle
b. Halberd
c. Ball
d. Star
e. Flat truck

_____
(Signature and Date)

.9 Discuss small boat recognition, including color scheme and boat types for the following: [ref. c, ch. 19]

a. Flag officers barge
b. Unit commanders gig
c. C.O.'s gig
d. Other ship's boats

_____
(Signature and Date)

## 114 HONORS AND CEREMONIES FUNDAMENTALS (CONT'D)

114.10 State the number/requirements of sideboys, gun salutes, and bells for the following dignitaries: [ref. b, ch.12]

a. Admiral
b. Vice Admiral
c. Rear Admiral (upper half)
d. Rear Admiral (lower half)
e. Captain
f. Commander
g. Lieutenant Commander and below

_____
(Signature and Date)

.11 Discuss how the order of anthems is determined. [ref. b, ch. 12]

_____
(Signature and Date)

# 115 NIGHT OBSERVATION DEVICES (NOD'S) FUNDAMENTALS

References:

[a] NAVEDTRA 14244, Signalman 3&2
[b] Manufacturer's Operating Instructions
[c] Standard Operating Procedures (SOP)

115.1 Discuss the NODs carried aboard your ship. [ref. c]

_____
(Signature and Date)

.2 State the safety precautions for NODs. [ref. a, ch. 2]

_____
(Signature and Date)

.3 Explain the steps to properly prepare a NOD for operation. [ref. a, ch. 2]

_____
(Signature and Date)

.4 Explain the focusing requirements necessary for clarity and comfort when using all NODs. [ref. a, ch. 2]

_____
(Signature and Date)

.5 Explain the procedure for overcoming night blindness when using NODs. [ref. b]

_____
(Signature and Date)

.6 Explain the purpose of the following controls and indicators: [ref. b]

a. Elevation dial and vernier
b. Elevation lock knob
c. Eyepiece focus ring
d. Lens cap
e. Objective shade lock knob
f. Power switch
g. Range focus ring
h. Train (azimuth) dial
i. Train (azimuth) lock knob

_____
(Signature and Date)

# 116 AN/KAS-1, 1A, CHEMICAL WARFARE DIRECTIONAL DETECTOR FUNDAMENTALS

References:

[a] SW073-AA-MMO-010, Technical Manual for Chemical Warfare Directional Detector, AN/KAS-1, AN/KAS-1A

116.1 Explain the primary function of the AN/KAS 1, 1A system. [ch. 3]

_____
(Signature and Date)

.2 Explain the secondary function of the AN/KAS 1, 1A system. [ch. 3]

_____
(Signature and Date)

.3 Define the following acronyms: [chs. 1, 2]

a. NFOV
b. PCU
c. WFOV

_____
(Signature and Date)

.4 State the purpose of the four-position SFW of the AN/KAS 1, 1A. [ch. 3]

_____
(Signature and Date)

.5 Discuss the nerve agent detection capabilities of the AN/KAS 1, 1A regarding attacks against: [ch. 3]

a. Amphibious assault ships proceeding ashore
b. Assault forces in the vicinity of the landing area
c. Ships in task force

_____
(Signature and Date)

## 116 AN/KAS-1, 1A, CHEMICAL WARFARE DIRECTIONAL DETECTOR FUNDAMENTALS (CONT'D)

116.6 Describe the capability of the AN/KAS 1, 1A in detecting and identifying chemical warfare nerve agent clouds: [ch. 3]

a. Against a land background
b. Against a sky background

_____
(Signature and Date)

.7 Define AN/KAS 1, 1A magnification capacities regarding: [ch. 2]

a. NFOV
b. WFOV

_____
(Signature and Date)

.8 State the power requirements of the AN/KAS 1, 1A: [ch. 3]

a. Ship's power to PCU
b. From PCU to sensor assembly

_____
(Signature and Date)

.9 Describe the following AN/KAS 1, 1A equipment:

a. AN/KAS 1, 1A [ch. 1]
b. Carrying/stowage case [ch. 1]
c. Foul weather cover [ch. 1]
d. Interconnecting cable [ch. 1]
e. Maintenance kit [ch. 1])
f. Overboard lanyard [chs. 1, 2]
g. PCU [ch. 1]
h. Pivot mount [ch. 1]

_____
(Signature and Date)

.10 State the handling precautions for the AN/KAS 1, 1A. [ch. 3]

_____
(Signature and Date)

## 116 AN/KAS-1, 1A, CHEMICAL WARFARE DIRECTIONAL DETECTOR FUNDAMENTALS (CONT'D)

116.11 Explain the proper use of the purge kit and lens cleaning kit. [ch. 4]

_____
(Signature and Date)

.12 Explain the initial equipment setup procedure for placing the AN/KAS 1, 1A in service after storage. [ch. 2]

_____
(Signature and Date)

.13 State the sensor assembly benchmark alignment procedures. [ch. 8]

_____
(Signature and Date)

.14 Explain the AN/KAS 1, 1A operational check procedure when placing it in service. [ch. 2]

_____
(Signature and Date)

.15 Describe the standard operational procedure to set up the sensor for use when it is on the mount bracket and lock assembly. [ch. 2]

_____
(Signature and Date)

.16 Identify the four keys of AN/KAS 1, 1A chemical cloud detection by discussing the four filter switch positions. [ch. 3]

_____
(Signature and Date)

.17 Discuss the shutdown procedure for the AN/KAS 1, 1A. [ch. 4]

_____
(Signature and Date)

.18 State the steps for AN/KAS 1, 1A removal/stowage. [ch. 4]

_____
(Signature and Date)

## 117 AMPHIBIOUS SIGNALING FUNDAMENTALS

References:

[a] NWP 22-3 (Rev. B), Ship to Shore Movement
[b] NAVEDTRA 14244, Signalman 3&2

117.1 Discuss and describe ships involved in amphibious operations:

a. ALMS [ref. a, app. C]
b. ACCS [ref. b]
c. CCS [ref. b]
d. PCS [ref. b]
e. SCS [ref. b]

_____
(Signature and Date)

.2 Discuss and describe boat/craft by day or by night: [ref. b, ch. 11]

a. ABGC/SSO
b. Boats/crafts used in boat waves
c. BGC/TCO
d. BWC

_____
(Signature and Date)

.3 Discuss and describe miscellaneous ships and crafts by day and by night: [ref. a, Annex C]

a. Amphibious Vehicle Pool Control Officer
b. Bowser boat
c. CRTS
d. Channel control boat
e. Medical boat
f. Salvage boat
g. Senior beachmaster
h. Transfer line control boat

_____
(Signature and Date)

.4 Discuss information contained in grid posits. [ref. a, Annex D]

_____
(Signature and Date)

## 117 AMPHIBIOUS SIGNALING FUNDAMENTALS (CONT'D)

117.5 Discuss the following debarkation areas: [ref. b, ch. 11]

a. Assembly circles
b. Rendezvous areas
c. Wave forming circles

_____
(Signature and Date)

.6 Discuss dispatch signals for day and night. [ref. a, Annex C]

_____
(Signature and Date)

.7 Discuss beach identifications for day and night. [ref. a, Annex C]

_____
(Signature and Date)

.8 Discuss debarkation stations. [ref. b, ch. 11]

_____
(Signature and Date)

.9 Discuss procedures for calling craft alongside by day. [ref. b, ch. 11]

_____
(Signature and Date)

.10 Discuss procedures for calling craft alongside by night: [ref. b, ch. 11]

a. Debarkation light box
b. Debarkation stations

_____
(Signature and Date)

## 117 AMPHIBIOUS SIGNALING FUNDAMENTALS (CONT'D)

117.11 Describe flags, lights, markers, signals: [ref. a, Annex C]

a. Beach markers (from seaward)
b. Cargo identification
c. Day and night boat and amphibious vehicle beaching signals
d. Miscellaneous beach signs
e. Miscellaneous flags and identification insignia
f. Oceanographic markers (from seaward)
g. Standard flags and identification insignia
h. Unloading point markers

_____
(Signature and Date)

.12 Discuss emergency signals for: [ref. b, ch. 11]

a. AAV emergency
b. Breakdown
c. Fire/flooding
d. Loss of communications
e. Man overboard

_____
(Signature and Date)

# 200 INTRODUCTION TO SYSTEMS

## 200.1 BASIC BUILDING BLOCKS

In this section, the equipment is broken down into smaller, more comprehensible, functional systems as basic building blocks in the learning process. Each system is written to reflect specific watchstation requirements by identifying the equipment most relevant to one or more designated watchstanders. The less complex systems may be identified and covered quickly or relegated to a lower priority to permit greater emphasis on more significant or complex systems.

## 200.2 COMPONENTS AND COMPONENT PARTS

For learning purposes each system is disassembled into two levels. Systems have components and components have parts. Do not expect to see every item which appears on a parts list to be in the PQS. Only those items which must be understood for operation/maintenance are listed. Normally a number of very broad (overview) systems are disassembled into their components or parts with the big picture as the learning goal. Items listed as components in such a system may then be analyzed as separate systems and broken down into components and parts. Example: the turbogenerators may be listed as a component of the Ship's Service Electrical Distribution system and then later detailed as an individual system for closer study.

## 200.3 FORMAT

Each system is organized within the following format:

- It lists the references to be used for study and asks you to explain the function of each system.
- It asks for the static facts of what or where the components and component parts are in relation to the system.
- It directs attention to the dynamics of how the component and component parts operate to make the system function.
- It specifies the parameters that must be immediately recalled.
- It requires study of the relationship between the system being studied and other systems or areas.

## 200.4 HOW TO COMPLETE

The systems you must complete are listed in the Prerequisites section of each watchstation. When you have mastered one or more systems, contact your Qualifier. The Qualifier will give you an oral examination on each system and, if satisfied you have sufficient knowledge of the system, will sign the appropriate system line items. You will be expected to demonstrate through oral or written examination a thorough understanding of each system required for your watchstation.

# 201 FLAGHOIST SYSTEM

References:

[a] NAVEDTRA 14244, Signalman 3&2
[b] NTP 4(D), Fleet Communications
[c] OPNAVINST 5100.19D, Navy Occupational Safety and Health (NAVOSH) Program Manual for Forces Afloat

201.1 SYSTEM COMPONENTS AND COMPONENT PARTS

Referring to a standard print of this system or the actual equipment, identify the following system components and component parts and discuss the designated items for each: [ref. a]

A. What is its function?
B. Where is it located?
C. What are the modes of operation or control?
D. What is the effect on system operation if this component fails?

| | | Questions |
|---|---|---|
| 201.1.1 | Flag bags [chs. 2, 5] | A B |
| | a. Finger | A B D |
| | b. Covers | A B D |
| | c. Fife rail | A B |
| .2 | Flags/pennants [ch. 2] | A B |
| | a. Fly | A B |
| | b. Hoist | A B |
| | c. Tabling | A B |
| | d. Ring | A B D |
| | e. Tail line | A B |
| | f. Snap hook | A B D |
| .3 | Tack line [chs. 2, 5] | A B D |
| .4 | Halyard [ch. 2] | A B C D |
| | a. Uphaul [ch. 5] | A B C D |
| | b. Downhaul [ch. 5] | A B C D |
| | c. Snap hook [ch. 5] | A B D |
| | d. Ring [chs. 2, 5] | A B D |
| | e. Retrievers [ch. 5] | A B C D |
| .5 | Masthead [ch. 5] | A B |
| .6 | Triatic stay [ch. 5] | A B D |
| .7 | Yardarm [ch. 5] | A B |
| .8 | Gaff [ch. 10] | A B |
| .9 | Block [ch. 2] | A B D |
| .10 | Truck [ch. 10] | A B |
| .11 | Belaying pins [ch. 5] | A B |

_____
(Signature and Date)

## 201 FLAGHOIST (CONT'D)

201.2 PRINCIPLES OF OPERATION

201.2.1 How do the components work together to achieve the system's function? [ref. a, ch. 5]

_____
(Signature and Date)

.2 How do you properly secure the uphaul and downhaul to belaying pins? [ref. a, ch. 5]

_____
(Signature and Date)

201.3 PARAMETERS/OPERATING LIMITS – None to be discussed.

201.4 SYSTEM INTERFACE

201.4.1 How do the following outside influences affect the operation of this system: [ref. b, ch. 8]

a. Inclement weather
b. Formation changes
c. Poor visibility
d. High winds

_____
(Signature and Date)

201.5 SAFETY PRECAUTIONS

201.5.1 What special safety precautions apply to: [ref. c, ch. C16]

a. Inclement weather
b. Formation changes
c. Poor visibility
d. High winds

_____
(Signature and Date)

## 202 OPTICAL EQUIPMENT SYSTEM

References:

[a] NAVEDTRA 14244, Signalman 3&2, Ch. 2

202.1 SYSTEM COMPONENTS AND COMPONENT PARTS

Referring to a standard print of this system or the actual equipment, identify the following system components and component parts and discuss the designated items for each:

A. What is its function?
B. Where is it located?
C. What are the modes of operation or control?
D. What are the probable indications if this component fails?

| | | **Questions** |
|---|---|---|
| 202.1.1 | Binoculars | A B D |
| .2 | Ship's binoculars | A B C D |

_____
(Signature and Date)

202.2 PRINCIPLES OF OPERATION– None to be discussed

202.3 PARAMETERS/OPERATING LIMITS – None to be discussed.

202.4 SYSTEM INTERFACE

202.4.1 How do the following outside influences affect the operation of this system:

a. Excessive heat
b. Sunlight
c. Severe shock
d. Improper maintenance
e. Moisture

_____
(Signature and Date)

202.5 SAFETY PRECAUTIONS

202.5.1 What special safety precautions apply to mounting ship's binoculars?

_____
(Signature and Date)

# 203 INCANDESCENT SEARCHLIGHT SYSTEM

References:

[a] NSTM S9086-N2-STM-010/CH-422R3/CH-422, Navigation and Signal Lights
[b] NAVEDTRA 14244, Signalman 3&2
[c] Ship's EMCON Bill
[d] OPNAVINST 5100.19D, Navy occupational Safety and Health (NAVOSH) Program Manual for Forces Afloat

203.1 SYSTEM COMPONENTS AND COMPONENT PARTS

Referring to a standard print of this system or the actual equipment, identify the following system components and component parts and discuss the designated items for each: [ref. a]

A. What is its function?
B. Where is it located?
C. What are the sources of power?
D. What are the probable indications if this component fails?
E. What is the effect on system operation if this component fails?

| | | Questions |
|---|---|---|
| 203.1.1 | Parabolic reflector | A B D E |
| .2 | Rear door | A B D E |
| .3 | Incandescent lamp | A B C D E |
| .4 | Shutter assembly | A B D E |
| .5 | Housing drum | A B D E |
| .6 | Yoke | A B D E |
| .7 | Signaling lever | A B D E |
| .8 | Locking clamps | A B D E |
| .9 | Rotary switch | A B C D E |
| .10 | Reducers | A B E |
| .11 | Filters | A B E |
| .12 | Type H hood | A B E |
| .13 | Screening hoods | A B E |

_____
(Signature and Date)

203.2 PRINCIPLES OF OPERATION

203.2.1 How do the components work together to achieve the system's function? [ref. b, ch. 2]

_____
(Signature and Date)

## 203 INCANDESCENT SEARCHLIGHT SYSTEM (CONT'D)

203.3 PARAMETERS/OPERATING LIMITS – None to be discussed.

203.4 SYSTEM INTERFACE

203.4.1 How do the following outside influences affect the operation of this system:

a. Loss of power [ref. a]
b. Emission control (EMCON) [ref. c]
c. NVG operations [ref. b, ch. 2]

_____
(Signature and Date)

203.5 SAFETY PRECAUTIONS

203.5.1 What special safety precautions apply to using electrical equipment? [ref. d, chs. B7, C9]

.2 What safety precautions must be observed when:

a. Opening the rear door [ref. a]
b. Replacing lamp [ref. b, ch. 2]

_____
(Signature and Date)

# 204 MERCURY-XENON SEARCHLIGHT SYSTEM

References:

[a] NSTM S9086-N2-STM-010/CH-422R3/CH-422, Navigation and Signal Lights
[b] NAVEDTRA 14244, Signalman 3&2
[c] Ship's EMCON Bill

204.1 SYSTEM COMPONENTS AND COMPONENT PARTS

Referring to a standard print of this system or the actual equipment, identify the following system components and component parts and discuss the designated items for each:

A. What is its function?
B. Where is it located?
C. What are the sources of power?
D. What are the safety/protective devices for this component/component part?
E. What protection is provided by this component/component part?
F. What is the effect on system operation if this component fails?

| | | **Questions** |
|---|---|---|
| 204.1.1 | Starter unit [ref. a] | A B C E F |
| .2 | Reflector [ref. a] | A B F |
| .3 | Rear door [ref. a] | A B F |
| .4 | Mercury-xenon lamp [ref. a] | A B C D E F |
| .5 | Lock screw [ref. a] | A B F |
| .6 | Focusing handle [ref. a] | A B F |
| .7 | Shutter assembly [ref. a] | A B F |
| .8 | Starter switch [ref. a] | A B C E F |
| .9 | Housing drum [ref. a] | A B F |
| .10 | Yoke [ref. a] | A B F |
| .11 | Signalling lever [ref. a] | A B F |
| .12 | Locking clamps [ref. a] | A B F |
| .13 | Ballast voltage unit [ref. a] | A B C D E F |
| .14 | Reducers [ref. c] | A B F |
| .15 | Screening hoods [ref. c] | A B F |
| .16 | Filters [ref. c] | A B F |
| .17 | Type H hood [ref. a] | A B F |
| .18 | Protective metal case (lamp) [ref. a] | A B E F |

_____
(Signature and Date)

## 204 MERCURY-XENON SEARCHLIGHT SYSTEM (CONT'D)

204.2 PRINCIPLES OF OPERATION

204.2.1 How do the components work together to achieve the system's function? [ref. a]

_____
(Signature and Date)

.2 What indications will you receive if the system is malfunctioning? [ref. a]

_____
(Signature and Date)

204.3 PARAMETERS/OPERATING LIMITS

204.3.1 What are the allowable operating limits for the Mercury-Xenon searchlight? [ref. a]

_____
(Signature and Date)

204.4 SYSTEM INTERFACE

204.4.1 How do the following outside influences affect the operation of this system:

a. Loss of electrical power [ref. a]
b. EMCON [ref. c]
c. NVG operations [ref. c]

_____
(Signature and Date)

204.5 SAFETY PRECAUTIONS

204.5.1 What special safety precautions apply to: [ref. a]

a. Lighting off lamp
b. Changing lamp
c. Disposal of lamp

_____
(Signature and Date)

.2 Why must you not open the door while the mercury-xenon light is in operation? [ref. a]

_____
(Signature and Date)

# 205 MULTIPURPOSE SIGNAL LIGHT SYSTEM

References:

[a] NAVEDTRA 14244, Signalman 3&2
[b] NSTM S9086-N2-STM-010/CH-422R3/CH-422, Navigation and Signal Lights
[c] OPNAVINST 5100.19D, Navy Occupational Safety and Health (NAVOSH) Program Manual for Forces Afloat

205.1 SYSTEM COMPONENTS AND COMPONENT PARTS

Referring to a standard print of this system or the actual equipment, identify the following system components and component parts and discuss the designated items for each: [ref. b]

A. What is its function?
B. Where is it located?
C. What are the sources of power?

| | | **Questions** |
|---|---|---|
| 205.1.1 | Sealed beam lamp | A B C |
| .2 | AC power supply unit | A B C |
| .3 | DC power supply unit | A B C |
| .4 | Housing | A B |
| .5 | Trigger assembly | A B |
| .6 | Dimmer switch | A B C |
| .7 | Filters | A B |
| .8 | Power cord | A B C |
| .9 | Storage box | A B C |
| .10 | Power supply selector switch | A B C |

_____
(Signature and Date)

205.2 PRINCIPLES OF OPERATION

205.2.1 How do the components work together to achieve the system's function? [ref. a, ch. 2]

_____
(Signature and Date)

205.3 PARAMETERS/OPERATING LIMITS

205.3.1 What is the effective operating range of the MPL? [ref. a, ch. 2]

_____
(Signature and Date)

## 205 MULTIPURPOSE SIGNAL LIGHT SYSTEM (CONT'D)

205.4 SYSTEM INTERFACE

205.4.1 How does loss of power affect the operation of this system? [ref. b]

_____

(Signature and Date)

205.5 SAFETY PRECAUTIONS

205.5.1 What special safety precautions must be observed to prevent electrical shock when operating the multipurpose signal light? [ref. c, ch. C9]

_____

(Signature and Date)

# 206 YARDARM BLINKER/INFRARED BEACON SYSTEM

References:

[a] NAVEDTRA 14244, Signalman 3&2
[b] NSTM S9086-N2-STM-010/CH-422R3/CH-422, Navigation and Signal Lights
[c] OPNAVINST 5100.19D, Navy Occupational Safety and Health (NAVOSH) Program Manual for Forces Afloat
[d] Ship's EMCON Bill

206.1 SYSTEM COMPONENTS AND COMPONENT PARTS

Referring to a standard print of this system or the actual equipment, identify the following system components and component parts and discuss the designated items for each: [ref. b]

A. What is its function?
B. Where is it located?
C. What are the sources of power?
D. What are the modes of operation or control?
E. What are the probable indications if this component fails?

| | | **Questions** |
|---|---|---|
| 206.1.1 | Power panel | A B C E |
| .2 | Control panel | A B C D E |
| .3 | Rotary switches | A B D E |
| .4 | Telegraph key(s) | A B C E |
| .5 | Yardarm blinker lights (upper/lower) | A B C D E |
| .6 | Infrared beacon lights/POT lights | A B C E |

_____
(Signature and Date)

206.2 PRINCIPLES OF OPERATION

206.2.1 How do the components work together to achieve the system's function? [ref. b]

_____
(Signature and Date)

.2 Using a diagram of this system, show the path of the ships power from the power panel to the yardarm blinker/infrared transmitter. [ref. b]

_____
(Signature and Date)

206.3 PARAMETERS/OPERATING LIMITS – None to be discussed.

## 206 YARDARM BLINKER/INFRARED BEACON SYSTEM (CONT'D)

206.4 SYSTEM INTERFACE

206.4.1 How do the following outside influences affect the operation of this system:

a. Loss of power [ref. b]
b. EMCON [ref. d]
c. NVG operations [ref. a, ch. 2]

_____
(Signature and Date)

206.5 SAFETY PRECAUTIONS

206.5.1 What general safety precautions must be observed when: [ref. c]

a. Working with electrical equipment [ch. C9]
b. Working aloft [ch. C8]

_____
(Signature and Date)

# 207 NIGHT OBSERVATION DEVICES (NOD'S) SYSTEM

References:

[a] NAVEDTRA 12401-A, Signalman
[b] Manufacturer's Operating Instructions
[c] Standard Operating Procedures (SOP)

207.1 SYSTEM COMPONENTS AND COMPONENT PARTS

Referring to a standard print of this system or the actual equipment, identify the following system components and component parts and discuss the designated items for each:

A. What is its function?
B. Where is it located?
C. What are the sources of power?
D. What are the modes of operation or control?
E. What are the probable indications if this component fails?
F. What are the safety/protective devices for this component/component part?

| | | **Questions** |
|---|---|---|
| 207.1.1 | Main housing [ref. a, ch. 2] | A B F |
| .2 | Image intensification assembly [ref. b] | A B C E |
| .3 | Power supply [ref. a, ch. 2] | A B C D |
| .4 | Mounting bracket [ref. c] | A B E |

_____
(Signature and Date)

207.2 PRINCIPLES OF OPERATION

207.2.1 How do the components work together to achieve the system's function? [ref. a, ch. 2]

_____
(Signature and Date)

207.3 PARAMETERS/OPERATING LIMITS

207.3.1 What are the normal operating values for night observation devices? [ref. b]

_____
(Signature and Date)

## 207 NIGHT OBSERVATION DEVICES SYSTEM (NOD'S) (CONT'D)

207.4 SYSTEM INTERFACE

207.4.1 How do the following outside influences affect the operation of this system: [ref. b]

a. Dust
b. High humidity
c. Extreme cold
d. Salt spray

_____
(Signature and Date)

207.5 SAFETY PRECAUTIONS

207.5.1 What special safety precautions apply to image intensifiers? [ref. b]

_____
(Signature and Date)

# 208 DEBARKATION LIGHT BOX SYSTEM

References:

[a] NWP 22-3 (Rev. B), Ship to Shore Movement
[b] Standard Operating Procedures (SOP)
[c] OPNAVINST 5100.19D, Navy Occupational Safety and Health (NAVOSH) Program Manual for Forces Afloat

208.1 SYSTEM COMPONENTS AND COMPONENT PARTS

Referring to a standard print of this system or the actual equipment, identify the following system components and component parts and discuss the designated items for each:

A. What is its function?
B. Where is it located?
C. What are the sources of power?
D. What are the modes of operation or control?

| | | **Questions** |
|---|---|---|
| 208.1.1 | Main housing [ref. a, app. A] | A B |
| .2 | Light bulbs [ref. a, app. A] | A B C D |
| .3 | Filters [ref. a, app. A] | A B D |
| .4 | Light switches [ref. b] | A B D |
| .5 | Power switch [ref. b] | A B C |

_____
(Signature and Date)

208.2 PRINCIPLES OF OPERATION

208.2.1 What indications are received if the system is malfunctioning? [ref. b]

_____
(Signature and Date)

208.3 PARAMETERS/OPERATING LIMITS – None to be discussed.

208.4 SYSTEM INTERFACE

208.4.1 How does adverse weather affect the operation of this system? [ref. a, app. C]

_____
(Signature and Date)

## 208 DEBARKATION LIGHT BOX SYSTEM (CONT'D)

208.5 SAFETY PRECAUTIONS

208.5.1 What safety precautions must be observed when operating this system? [ref. c, ch. C9]

_____
(Signature and Date)

.2 What safety precautions must be observed during inclement weather? [ref. a, app. C]

_____
(Signature and Date)

# 209 AN/KAS-1, 1A, CHEMICAL WARFARE DIRECTIONAL DETECTOR SYSTEM

References:

[a] SW073-AA-MMO-010, Technical Manual for Chemical Warfare Directional Detector, AN/KAS-1, AN/KAS-1A

[b] OPNAVINST 5100.19D, Navy Occupational Safety and Health (NAVOSH) Program Manual for Forces Afloat

209.1 SYSTEM COMPONENTS AND COMPONENT PARTS

Referring to a standard print of this system or the actual equipment, identify the following system components and component parts and discuss the designated items for each: [ref. a]

A. What is its function?
B. Where is it located?
C. What are the sources of power?
D. What are the modes of operation or control?
E. What are the safety/protective devices for this component/component part?
F. What protection is provided by this component/component part?
G. What are the probable indications if this component fails?
H. What is the effect on system operation if this component fails?

| | | **Questions** |
|---|---|---|
| 209.1.1 | Sensor unit [ch. 1] | A B C D E G |
| .2 | Power conversion unit [ch. 1] | A B C D E G H |
| .3 | Cord assembly [ch. 2] | A B C D E G H |
| .4 | Interconnecting cable [ch. 2] | A B C G H |
| .5 | Maintenance kit (expendable nitrogen cartridges) [ch. 1] | A B H |
| .6 | Foul weather cover [ch. 1] | A B F H |
| .7 | Overboard lanyard [ch. 1] | A B F H |
| .8 | Protective lens cover [ch. 2] | A B F H |
| .9 | Carrying/stowage case [ch. 1] | A B F |
| .10 | Filters [ch. 3] | A B D G H |

_____
(Signature and Date)

209.2 PRINCIPLES OF OPERATION

209.2.1 How do the components work together to achieve the system's function? [ref. a, ch. 3]

_____
(Signature and Date)

## 209 AN/KAS-1, 1A, CHEMICAL WARFARE DIRECTIONAL DETECTOR SYSTEM (CONT'D)

209.2.2 What indications are received if the system is malfunctioning? [ref. a, ch. 5]

_____
(Signature and Date)

209.3 PARAMETERS/OPERATING LIMITS

209.3.1 What are the allowable operating limits? [ref. a, ch. 1]

_____
(Signature and Date)

209.4 SYSTEM INTERFACE – None to be discussed.

209.5 SAFETY PRECAUTIONS

209.5.1 What special safety precautions apply to: [ref. a, ch. 4]

a. Dealing with a nitrogen purge bottle
b. The two-person rule

_____
(Signature and Date)

.2 What safety precautions apply to working with electricity? [ref. b, chs. B7, C9]

_____
(Signature and Date)

# 300 INTRODUCTION TO WATCHSTATIONS

## 300.1 INTRODUCTION

The Watchstation section of your PQS is where you get a chance to demonstrate to your Qualifier that you can put the knowledge you have gained in the previous sections to use. It allows you to practice the tasks required for your watchstation and to handle abnormal conditions and emergencies. Before starting your assigned tasks, you must complete the prerequisites that pertain to the performance of that particular task. Satisfactory completion of all prerequisites is required prior to achievement of final watchstation qualification.

## 300.2 FORMAT

Each watchstation in this section contains:

- A FINAL QUALIFICATION PAGE, which is used to obtain the required signatures for approval and recording of Final Qualification.

- PREREQUISITES, which are items that must be certified completed before you can begin qualification for a particular watchstation. Prerequisites may include schools, watchstation qualifications from other PQS books, and fundamentals, systems, or watchstation qualifications from this book. Prior to signing off each prerequisite line item, the Qualifier must verify completion from existing records. Record the date of actual completion, not the sign-off date.

- WATCHSTATION Performance, which is the practical factors portion of your qualification. The performance is broken down as follows:

    Tasks (routine operating tasks that are performed frequently)
    Infrequent Tasks
    Abnormal Conditions
    Emergencies
    Training Watches

If there are multiple watchstations, a QUALIFICATION PROGRESS SUMMARY will appear at the end of the Standard.

# 300 INTRODUCTION TO WATCHSTATIONS (CONT'D)

## 300.3 OPERATING PROCEDURES

The PQS deliberately makes no attempt to specify the procedures to be used to complete a task or control or correct a casualty. The only proper sources of this information are the technical manuals, Engineering Operational Sequencing System (EOSS), Naval Air Training and Operating Procedures Standardization (NATOPS) or other policy-making documents prepared for a specific installation or a piece of equipment. Additionally, the level of accuracy required of a trainee may vary from school to school, ship to ship, and squadron to squadron based upon such factors as mission requirements. Thus, proficiency may be confirmed only through demonstrated performance at a level of competency sufficient to satisfy the Commanding Officer.

## 300.4 DISCUSSION ITEMS

Though actual performance of evolutions is always preferable to observation or discussion, some items listed in each watchstation may be too hazardous or time consuming to perform or simulate. Therefore, you may be required to discuss such items with your Qualifier.

## 300.5 NUMBERING

Each Final Qualification is assigned both a watchstation number and a NAVEDTRA Final Qualification number. The NAVEDTRA number is to be used for recording qualifications in service and training records.

## 300.6 HOW TO COMPLETE

After completing the required prerequisites applicable to a particular task, you may perform the task under the supervision of a qualified watchstander. If you satisfactorily perform the task and can explain each step, your Qualifier will sign you off for that task. You may then be required to stand a watch or a number of watches to earn qualification. There are two levels of supervision for this:

- Under Instruction: You will perform the duties and tasks of the watchstation under the direct supervision of a qualified watchstander or supervisor. This is intended to be a one-on-one training situation.
- Under qualified supervision: You will perform the duties and tasks of the watchstation with minor guidance from a qualified watchstander or supervisor. This is intended to allow you to develop proficiency in and operational environment with minimal oversight or have a supervisor close at hand if needed.

After all line items have been completed, your Qualifier will verify Final Qualification by signing and dating the Final Qualification pages.

# 301 LOOKOUT

NAME_____ RATE/RANK_____

This page is to be used as a record of satisfactory completion of designated sections of the Personnel Qualification Standard (PQS). Only specified supervisors may signify completion of applicable sections either by written or oral examination, or by observation of performance. The examination or checkout need not cover every item; however, a sufficient number should be covered to demonstrate the examinee's knowledge. Should supervisors *give away* their signatures, unnecessary difficulties can be expected in future routine operations.

A copy of this completed page shall be kept in the individual's training jacket.

---

The trainee has completed all PQS requirements for this watchstation. Recommend designation as a qualified LOOKOUT (NAVEDTRA 43354-C)

RECOMMENDED_____ DATE_____
Supervisor

RECOMMENDED_____ DATE_____
Division Officer

RECOMMENDED_____ DATE_____
Department Head

QUALIFIED_____ DATE_____
Commanding Officer or Designated Representative

SERVICE RECORD ENTRY_____ DATE_____

# 301 LOOKOUT

Estimated completion time: 3 weeks

301.1 PREREQUISITES

**FOR OPTIMUM TRAINING EFFECTIVENESS, THE FOLLOWING ITEMS SHOULD BE COMPLETED PRIOR TO STARTING YOUR ASSIGNED TASKS BUT SHALL BE COMPLETED PRIOR TO FINAL WATCHSTATION QUALIFICATION.**

301.1.1 PQS QUALIFICATIONS:

Ship's Control and Navigation (NAVEDTRA 43492-2D), 301 Bridge Telephone Talker

Completed _____
(Qualifier and Date)

.2 OTHER QUALIFICATIONS:

Visual acuity correctable to 20/20 in both eyes and normal color perception

Completed _____
(Qualifier and Date)

.3 FUNDAMENTALS FROM THIS PQS:

101 Safety Precautions

Completed _____ 4% of Watchstation
(Qualifier and Date)

103 Lookout

Completed _____ 4% of Watchstation
(Qualifier and Date)

113 Navigation

Completed _____ 4% of Watchstation
(Qualifier and Date)

115 Night Observation Devices (NOD's)

Completed _____ 4% of Watchstation
(Qualifier and Date)

## 301 LOOKOUT (CONT'D)

301.1.3 116 AN-KAS-1, 1A, Chemical Warfare Directional Detector

Completed _____ 4% of Watchstation
(Qualifier and Date)

.4 SYSTEMS FROM THIS PQS:

202 Optical Equipment

Completed _____ 4% of Watchstation
(Qualifier and Date)

207 Night Observation Devices (NOD's)

Completed _____ 4% of Watchstation
(Qualifier and Date)

209 AN/KAS-1, 1A, Chemical Warfare Directional Detector

Completed _____ 4% of Watchstation
(Qualifier and Date)

301.2 TASKS

For the tasks listed below:

A. What are the steps of this procedure?
B. What are the reasons for each step?
C. What control/coordination is required?
D. What means of communications are used?
E. What safety precautions must be observed?
F. What parameters/operating limits must be monitored?
G. Satisfactorily perform this task.

| | **Questions** |
|---|---|
| 301.2.1 Detect and report aircraft (3 times) | A B C D G |

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

## 301 LOOKOUT (CONT'D)

**Questions**

301.2.2 Detect and report surface craft (3 times) A B C D G

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.4 Detect and report partially submerged objects (3 times) A B C D G

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.5 Make amplifying report to bridge and CIC regarding relative movement, target angle, lights, and sound signals (3 times) A B C D G

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.6 Operate night vision equipment (3 times) A B C D E F G

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

COMPLETED .2 AREA COMPRISES 30% OF WATCHSTATION.

## 301 LOOKOUT (CONT'D)

301.3 INFREQUENT TASKS

For the infrequent tasks listed below:

A. What are the steps of this procedure?
B. What are the reasons for each step?
C. What control/coordination is required?
D. What means of communications are used?
E. Satisfactorily perform or simulate this infrequent task.

**Questions**

301.3.1 Act as low visibility lookout (3 times) A B C D E

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.2 Report sighting distress signals (3 times) A B C D E

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.3 Use smoke float, life ring, and light float A B C D E

_____
(Signature and Date)

.4 Recognize and report fog signals by a ship under way (3 times) A B C D E

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

## 301 LOOKOUT (CONT'D)

**Questions**

301.3.5 Recognize and report fog signals by a ship under way with no way on (3 times) A B C D E

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.6 Recognize and report fog signals by a ship at anchor (3 times) A B C D E

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.7 Detect and report discolored water A B C D E

_____
(Signature and Date)

COMPLETED .3 AREA COMPRISES 21% OF WATCHSTATION.

301.4 ABNORMAL CONDITIONS

For the abnormal conditions listed below:

A. What indications and alarms are received?
B. What immediate action is required?
C. What are the probable causes?
D. What operating limitations are imposed?
E. How does this condition affect other operations/equipment/watchstations?
F. Satisfactorily perform or simulate the corrective/immediate action for this abnormal condition.

**Questions**

301.4.1 Binocular lens fogged/bubbled A B C D E F

_____
(Signature and Date)

## 301 LOOKOUT (CONT'D)

**Questions**

301.4.2 Battery failure on night vision equipment — A B C D E F

_____
(Signature and Date)

.3 Adverse weather — D E F

_____
(Signature and Date)

.4 Loss of communications — B C D E F

_____
(Signature and Date)

COMPLETED .4 AREA COMPRISES 6% OF WATCHSTATION.

301.5 EMERGENCIES

For the emergencies listed below:

A. What indications and alarms are received?
B. What immediate action is required?
C. What other emergencies or malfunctions may occur if immediate action is not taken?
D. How does this emergency affect other operations/equipment/watchstations?
E. Satisfactorily perform or simulate the immediate action for this emergency.

**Questions**

301.5.1 Collision (2 times) — A B C D E

_____
(Signature and Date)

_____
(Signature and Date)

.2 Man overboard (own ship) (2 times) — A B C D E

_____
(Signature and Date)

_____
(Signature and Date)

## 301 LOOKOUT (CONT'D)

**Questions**

301.5.3 Man overboard of another ship while at lifeguard station (2 times) A B C D E

_____
(Signature and Date)

_____
(Signature and Date)

.4 Man overboard of another ship while on plane guard station (2 times) A B C D E

_____
(Signature and Date)

_____
(Signature and Date)

.5 Helo/plane crash/ditching (2 times) A B C D E

_____
(Signature and Date)

_____
(Signature and Date)

.6 Chemical/biological attack (2 times) A B C D E

_____
(Signature and Date)

_____
(Signature and Date)

.7 Nuclear attack (2 times) A B C D E

_____
(Signature and Date)

_____
(Signature and Date)

COMPLETED .5 AREA COMPRISES 16% OF WATCHSTATION.

## 301 LOOKOUT (CONT'D)

301.6 WATCHES

301.6.1 STAND THE FOLLOWING WATCHES UNDER QUALIFIED SUPERVISION:

Lookout (5 times)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

COMPLETED .6 AREA COMPRISES 5% OF WATCHSTATION

301.7 EXAMINATIONS (OPTIONAL EXCEPT AS REQUIRED BY TYCOM/ISIC, ETC.)

301.7.1 EXAMINATIONS — Pass a written examination

_____
(Signature and Date)

.2 EXAMINATIONS — Pass an oral examination board

_____
(Signature and Date)

# 302 SIGNAL BRIDGE RECORDER/MESSENGER

NAME_____ RATE/RANK_____

This page is to be used as a record of satisfactory completion of designated sections of the Personnel Qualification Standard (PQS). Only specified supervisors may signify completion of applicable sections either by written or oral examination, or by observation of performance. The examination or checkout need not cover every item; however, a sufficient number should be covered to demonstrate the examinee's knowledge. Should supervisors *give away* their signatures, unnecessary difficulties can be expected in future routine operations.

A copy of this completed page shall be kept in the individual's training jacket.

---

The trainee has completed all PQS requirements for this watchstation. Recommend designation as a qualified SIGNAL BRIDGE RECORDER/MESSENGER (NAVEDTRA 43354-C).

RECOMMENDED_____ DATE_____
Supervisor

RECOMMENDED_____ DATE_____
Division Officer

RECOMMENDED_____ DATE_____
Department Head

QUALIFIED_____ DATE_____
Commanding Officer or Designated Representative

SERVICE RECORD ENTRY_____ DATE_____

# 302 SIGNAL BRIDGE RECORDER/MESSENGER

Estimated completion time: 3 weeks

302.1 PREREQUISITES

**FOR OPTIMUM TRAINING EFFECTIVENESS, THE FOLLOWING ITEMS SHOULD BE COMPLETED PRIOR TO STARTING YOUR ASSIGNED TASKS BUT SHALL BE COMPLETED PRIOR TO FINAL WATCHSTATION QUALIFICATION.**

302.1.1 Fundamentals From This PQS:

101 Safety Precautions

Completed _____ 5% of Watchstation
(Qualifier and Date)

102 Security

Completed _____ 5% of Watchstation
(Qualifier and Date)

105 Visual Message Format

Completed _____ 5% of Watchstation
(Qualifier and Date)

112 Logs, Files, and Publications

Completed _____ 5% of Watchstation
(Qualifier and Date)

302.2 TASKS

For the tasks listed below:

A. What are the steps of this procedure?
B. What are the reasons for each step?
C. Satisfactorily perform this task.

| | | **Questions** |
|---|---|---|
| 302.2.1 | Block print the alphabet and numerals 0-9 (2 times) | C |

_____
(Signature and Date)

_____
(Signature and Date)

## 302 SIGNAL BRIDGE RECORDER/MESSENGER (CONT'D)

**Questions**

302.2.2 Recite the phonetic equivalent for all flags/pennants B C

_____
(Signature and Date)

.3 Draft a plaindress visual message for transmission by flashing light (5 times) A B C

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.4 Draft a plaindress visual message for transmission by semaphore (5 times) A B C

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

## 302 SIGNAL BRIDGE RECORDER/MESSENGER (CONT'D)

**Questions**

302.2.5 Record a visual message (5 times) A B C

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.6 Route visual message (3 times) A B C

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.7 Identify signal bridge publications by short title (3 times) A B C

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

## 302 SIGNAL BRIDGE RECORDER/MESSENGER (CONT'D)

**Questions**

302.2.8 Identify signal bridge publications by long title (3 times) A B C

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.9 Perform page check A B C

_____
(Signature and Date)

.10 Record publication change/correction (3 times) A B C

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

COMPLETED .2 AREA COMPRISES 50% OF WATCHSTATION.

302.3 INFREQUENT TASKS – None to be discussed.

302.4 ABNORMAL CONDITIONS – None to be discussed.

302.5 EMERGENCIES – None to be discussed.

## 302 SIGNAL BRIDGE RECORDER/MESSENGER (CONT'D)

302.6 WATCHES

302.6.1 STAND THE FOLLOWING WATCHES UNDER QUALIFIED SUPERVISION:

Signal Bridge Recorder/Messenger (5 times)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

COMPLETED .6 AREA COMPRISES 30% OF WATCHSTATION.

302.7 EXAMINATIONS (OPTIONAL EXCEPT AS REQUIRED BY TYCOM/ISIC, ETC.)

302.7.1 EXAMINATIONS — Pass a written examination

_____
(Signature and Date)

.2 EXAMINATIONS — Pass an oral examination board

_____
(Signature and Date)

# 303 FLAG BAG OPERATOR

NAME_____ RATE/RANK_____

This page is to be used as a record of satisfactory completion of designated sections of the Personnel Qualification Standard (PQS). Only specified supervisors may signify completion of applicable sections either by written or oral examination, or by observation of performance. The examination or checkout need not cover every item; however, a sufficient number should be covered to demonstrate the examinee's knowledge. Should supervisors *give away* their signatures, unnecessary difficulties can be expected in future routine operations.

A copy of this completed page shall be kept in the individual's training jacket.

---

The trainee has completed all PQS requirements for this watchstation. Recommend designation as a qualified FLAG BAG OPERATOR (NAVEDTRA 43354-C).

RECOMMENDED_____ DATE_____
Supervisor

RECOMMENDED_____ DATE_____
Division Officer

RECOMMENDED_____ DATE_____
Department Head

QUALIFIED_____ DATE_____
Commanding Officer or Designated Representative

SERVICE RECORD ENTRY_____ DATE_____

# 303 FLAG BAG OPERATOR

Estimated completion time: 3 weeks

303.1 PREREQUISITES

**FOR OPTIMUM TRAINING EFFECTIVENESS, THE FOLLOWING ITEMS SHOULD BE COMPLETED PRIOR TO STARTING YOUR ASSIGNED TASKS BUT SHALL BE COMPLETED PRIOR TO FINAL WATCHSTATION QUALIFICATION.**

303.1.1 FUNDAMENTALS FROM THIS PQS:

101 Safety Precautions

Completed _____ 5% of Watchstation
(Qualifier and Date)

106 Signal Flags

Completed _____ 5% of Watchstation
(Qualifier and Date)

107 Flaghoist

Completed _____ 5% of Watchstation
(Qualifier and Date)

.2 SYSTEMS FROM THIS PQS:

201 Flaghoist

Completed _____ 5% of Watchstation
(Qualifier and Date)

## 303 FLAG BAG OPERATOR (CONT'D)

303.2 TASKS

For the tasks listed below:

A. What are the steps of this procedure?
B. What are the reasons for each step?
C. What means of communications are used?
D. What safety precautions must be observed?
E. Satisfactorily perform this task.

**Questions**

303.2.1 Bend on flags (3 times) A B C D E

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.2 Hoist flags to dip (3 times) A B C D E

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.3 Hoist flags closeup (3 times) A B C D E

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

## 303 FLAG BAG OPERATOR (CONT'D)

**Questions**

303.2.4 Haul down flag signals (3 times) A B C D E

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.5 Clear downhauls and stow flags in bag (3 times) A B C D E

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.6 Report ready bag (3 times) A B C D E

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

COMPLETED .2 AREA COMPRISES 40% OF WATCHSTATION.

303.3 INFREQUENT TASKS – None to be discussed.

## 303 FLAG BAG OPERATOR (CONT'D)

303.4 ABNORMAL CONDITIONS

For the abnormal conditions listed below:

A. What immediate action is required?
B. What are the probable causes?
C. What operating limitations are imposed?
D. What emergencies or malfunctions may occur if immediate action is not taken?
E. Satisfactorily perform or simulate the corrective/immediate action for this abnormal condition.

| | | **Questions** |
|---|---|---|
| 303.4.1 | Loss of hoist | A B C D E |

_____
(Signature and Date)

| | | |
|---|---|---|
| .2 | Improper operation of retriever | A B C D E |

_____
(Signature and Date)

COMPLETED .4 AREA COMPRISES 5% OF WATCHSTATION.

303.5 EMERGENCIES

For the emergencies listed below:

A. What indications and alarms are received?
B. What immediate action is required?
C. What operating limitations are imposed?
D. What other emergencies or malfunctions may occur if immediate action is not taken?
E. Satisfactorily perform or simulate the immediate action for this emergency.

| | | **Questions** |
|---|---|---|
| 303.5.1 | Fire in flag bag | A B C D E |

_____
(Signature and Date)

COMPLETED .5 AREA COMPRISES 5% OF WATCHSTATION.

## 303 FLAG BAG OPERATOR (CONT'D)

303.6 WATCHES

303.6.1 STAND THE FOLLOWING WATCHES UNDER QUALIFIED SUPERVISION:

Flag Bag Operator (3 times)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

COMPLETED .6 AREA COMPRISES 30% OF WATCHSTATION.

303.7 EXAMINATIONS (OPTIONAL EXCEPT AS REQUIRED BY TYCOM/ISIC, ETC.)

303.7.1 EXAMINATIONS — Pass a written examination

_____
(Signature and Date)

.2 EXAMINATIONS — Pass an oral examination board

_____
(Signature and Date)

# 304 IN-PORT DUTY SIGNALMAN

NAME_____ RATE/RANK_____

This page is to be used as a record of satisfactory completion of designated sections of the Personnel Qualification Standard (PQS). Only specified supervisors may signify completion of applicable sections either by written or oral examination, or by observation of performance. The examination or checkout need not cover every item; however, a sufficient number should be covered to demonstrate the examinee's knowledge. Should supervisors *give away* their signatures, unnecessary difficulties can be expected in future routine operations.

A copy of this completed page shall be kept in the individual's training jacket.

---

The trainee has completed all PQS requirements for this watchstation. Recommend designation as a qualified IN-PORT DUTY SIGNALMAN (NAVEDTRA 43354-C).

RECOMMENDED_____ DATE_____
Supervisor

RECOMMENDED_____ DATE_____
Division Officer

RECOMMENDED_____ DATE_____
Department Head

QUALIFIED_____ DATE_____
Commanding Officer or Designated Representative

SERVICE RECORD ENTRY_____ DATE_____

# 304 IN-PORT DUTY SIGNALMAN

Estimated completion time: 4 weeks

304.1 PREREQUISITES

**FOR OPTIMUM TRAINING EFFECTIVENESS, THE FOLLOWING ITEMS SHOULD BE COMPLETED PRIOR TO STARTING YOUR ASSIGNED TASKS BUT SHALL BE COMPLETED PRIOR TO FINAL WATCHSTATION QUALIFICATION.**

304.1.1 Fundamentals From This PQS:

101 Safety Precautions

Completed _____ 2% of Watchstation
(Qualifier and Date)

102 Security

Completed _____ 2% of Watchstation
(Qualifier and Date)

103 Lookout

Completed _____ 2% of Watchstation
(Qualifier and Date)

105 Visual Message Format

Completed _____ 2% of Watchstation
(Qualifier and Date)

106 Signal Flags

Completed _____ 2% of Watchstation
(Qualifier and Date)

107 Flaghoist

Completed _____ 2% of Watchstation
(Qualifier and Date)

108 Call Signs

Completed _____ 2% of Watchstation
(Qualifier and Date)

## 304 IN-PORT DUTY SIGNALMAN (CONT'D)

304.1.1 109 Flashing Light Procedures

Completed _____ 2% of Watchstation
(Qualifier and Date)

110 Semaphore Procedures

Completed _____ 2% of Watchstation
(Qualifier and Date)

111 In-Port Duty Signalman

Completed _____ 2% of Watchstation
(Qualifier and Date)

112 Logs, Files, and Publications

Completed _____ 2% of Watchstation
(Qualifier and Date)

114 Honors and Ceremonies

Completed _____ 2% of Watchstation
(Qualifier and Date)

.2 SYSTEMS FROM THIS PQS:

201 Flaghoist

Completed _____ 2% of Watchstation
(Qualifier and Date)

202 Optical Equipment

Completed _____ 2% of Watchstation
(Qualifier and Date)

203 Incandescent Searchlight

Completed _____ 2% of Watchstation
(Qualifier and Date)

204 Mercury-Xenon Searchlight

Completed _____ 2% of Watchstation
(Qualifier and Date)

205 Multipurpose Signal Light

Completed _____ 2% of Watchstation
(Qualifier and Date)

## 304 IN-PORT DUTY SIGNALMAN (CONT'D)

304.2 TASKS

For the tasks listed below:

A. What are the steps of this procedure?
B. What are the reasons for each step?
C. What control/coordination is required?
D. What means of communications are used?
E. Satisfactorily perform this task.

**Questions**

304.2.1 Observe sunrise (3 times) A B C D E

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.2 Observe colors (3 times) A B C D E

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.3 Act as rescue and assistance signalman A B C D E

_____
(Signature and Date)

.4 Maintain station files, visual log, and watch-to-watch inventory (3 times) A B C D E

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

## 304 IN-PORT DUTY SIGNALMAN (CONT'D)

**Questions**

304.2.5 Make preparations for getting under way (3 times) A B C D E

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.6 Report ship movements (3 times) A B C D E

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.7 Review command instructions/SOPs/message traffic for compliance with upcoming events (3 times) A B C E

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.8 Reeve and splice halyards (3 times) A B C E

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

COMPLETED .2 AREA COMPRISES 34% OF WATCHSTATION.

## 304 IN-PORT DUTY SIGNALMAN (CONT'D)

304.3 INFREQUENT TASKS

For the infrequent tasks listed below:

A. What are the steps of this procedure?
B. What are the reasons for each step?
C. What means of communications are used?
D. Satisfactorily perform or simulate this infrequent task.

**Questions**

304.3.1 Relay emergency action signals to SOPA (3 times) A B C D

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

COMPLETED .3 AREA COMPRISES 7% OF WATCHSTATION.

304.4 ABNORMAL CONDITIONS – None to be discussed.

304.5 EMERGENCIES

For the emergencies listed below:

A. What indications and alarms are received?
B. What immediate action is required?
C. Satisfactorily perform or simulate the immediate action for this emergency.

**Questions**

304.5.1 Fire (3 times) A B C

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

COMPLETED .5 AREA COMPRISES 5% OF WATCHSTATION.

## 304 IN-PORT DUTY SIGNALMAN (CONT'D)

304.6 WATCHES

304.6.1 Stand the following watches under qualified supervision:

In-Port Duty Signalman (3 times)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

COMPLETED .6 AREA COMPRISES 20% OF WATCHSTATION.

304.7 EXAMINATIONS (OPTIONAL EXCEPT AS REQUIRED BY TYCOM/ISIC, ETC.)

304.7.1 EXAMINATIONS — Pass a written examination

_____
(Signature and Date)

.2 EXAMINATIONS — Pass an oral examination board

_____
(Signature and Date)

# 305 EXPERT LOOKOUT

NAME_____ RATE/RANK_____

This page is to be used as a record of satisfactory completion of designated sections of the Personnel Qualification Standard (PQS). Only specified supervisors may signify completion of applicable sections either by written or oral examination, or by observation of performance. The examination or checkout need not cover every item; however, a sufficient number should be covered to demonstrate the examinee's knowledge. Should supervisors *give away* their signatures, unnecessary difficulties can be expected in future routine operations.

A copy of this completed page shall be kept in the individual's training jacket.

---

The trainee has completed all PQS requirements for this watchstation. Recommend designation as a qualified EXPERT LOOKOUT (NAVEDTRA 43354-C).

RECOMMENDED_____ DATE_____
Supervisor

RECOMMENDED_____ DATE_____
Division Officer

RECOMMENDED_____ DATE_____
Department Head

QUALIFIED_____ DATE_____
Commanding Officer or Designated Representative

SERVICE RECORD ENTRY_____ DATE_____

# 305 EXPERT LOOKOUT

Estimated completion time: 13 weeks

305.1 PREREQUISITES

**FOR OPTIMUM TRAINING EFFECTIVENESS, THE FOLLOWING ITEMS SHOULD BE COMPLETED PRIOR TO STARTING YOUR ASSIGNED TASKS BUT SHALL BE COMPLETED PRIOR TO FINAL WATCHSTATION QUALIFICATION.**

305.1.1 WATCHSTATIONS FROM THIS PQS:

301 Lookout

Completed _____
(Qualifier and Date)

.2 FUNDAMENTALS FROM THIS PQS:

104 Expert Lookout

Completed _____ 14% of Watchstation
(Qualifier and Date)

305.2 TASKS

For the tasks listed below:

A. What are the major distinguishing features between classes of these ships/aircraft in the U.S. Navy??
B. What are the primary distinguishing features between the U.S. Navy and foreign ship/aircraft?
C. What is the primary mission of this ship/aircraft?
D. What is the primary threat to own ship posed by this class of ships/aircraft?
E. What are the steps of this procedure?
F. What are the reasons for each step?
G. What control/coordination is required?
H. Satisfactorily perform this task.

| | **Questions** |
|---|---|
| 305.2.1 Detect, identify, and report a carrier (3 times) | A B C D H |

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

## 305 EXPERT LOOKOUT (CONT'D)

**Questions**

305.2.2 Detect, identify, and report a cruiser (3 times) A B C D H

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.3 Detect, identify, and report a destroyer (3 times) A B C D H

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.4 Detect, identify, and report a frigate (3 times) A B C D H

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.5 Detect, identify, and report a amphibious vessels (3 times) A B C D H

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

## 305 EXPERT LOOKOUT (CONT'D)

**Questions**

305.2.6 Detect, identify, and report a submarine (3 times) A B C D H

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.7 Detect, identify, and report a fast patrol boat (3 times) A B C D H

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.8 Detect, identify, and report a patrol/reconnaissance aircraft (3 times) A B C D H

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.9 Detect, identify, and report a bomber aircraft (3 times) A B C D H

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

## 305 EXPERT LOOKOUT (CONT'D)

**Questions**

305.2.10 Detect, identify, and report a fighter aircraft (3 times) A B C D H

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.11 Detect, identify, and report attack aircraft (3 times) A B C D H

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.12 Detect, identify, and report a helicopter (3 times) A B C D H

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.13 Detect and report aids to navigation by type (3 times) E F G H

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date

## 305 EXPERT LOOKOUT (CONT'D)

**Questions**

305.2.14 Recognize and report sound signals from aids to navigation (3 times) E F G H

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

COMPLETED .2 AREA COMPRISES 22% OF WATCHSTATION.

305.3 INFREQUENT TASKS

For the infrequent tasks listed below:

A. What are the indications of this weapon by day/ night?
B Satisfactorily perform or simulate this infrequent task.

**Questions**

305.3.1 Identify and report a missile launch indication A B

_____
(Signature and Date)

.2 Identify and report gunfire A B

_____
(Signature and Date)

.3 Identify and report mines A B

_____
(Signature and Date)

COMPLETED .3 AREA COMPRISES 15% OF WATCHSTATION.

305.4 ABNORMAL CONDITIONS – None to be discussed.

## 305 EXPERT LOOKOUT (CONT'D)

305.5 EMERGENCIES

For the emergencies listed below:

A. What are the indications of this by day/ night?
B. Satisfactorily perform or simulate the immediate action for this emergency

| | | **Questions** |
|---|---|---|
| 305.5.1 | Inbound weapon | A B |

_____
(Signature and Date)

COMPLETED .5 AREA COMPRISES 14% OF WATCHSTATION.

305.6 WATCHES

305.6.1 STAND THE FOLLOWING WATCHES UNDER QUALIFIED SUPERVISION:

Expert Lookout (5 times)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

COMPLETED .6 AREA COMPRISES 35% OF WATCHSTATION.

## 305 EXPERT LOOKOUT (CONT'D)

305.7 EXAMINATIONS (OPTIONAL EXCEPT AS REQUIRED BY TYCOM/ISIC, ETC.)

305.7.1 EXAMINATIONS — Pass a written examination

_____
(Signature and Date)

.2 EXAMINATIONS — Pass an oral examination board

_____
(Signature and Date)

# 306 SIGNAL BRIDGE SPOTTER

NAME_____ RATE/RANK_____

This page is to be used as a record of satisfactory completion of designated sections of the Personnel Qualification Standard (PQS). Only specified supervisors may signify completion of applicable sections either by written or oral examination, or by observation of performance. The examination or checkout need not cover every item; however, a sufficient number should be covered to demonstrate the examinee's knowledge. Should supervisors *give away* their signatures, unnecessary difficulties can be expected in future routine operations.

A copy of this completed page shall be kept in the individual's training jacket.

---

The trainee has completed all PQS requirements for this watchstation. Recommend designation as a qualified SIGNAL BRIDGE SPOTTER (NAVEDTRA 43354-C).

RECOMMENDED_____ DATE_____
Supervisor

RECOMMENDED_____ DATE_____
Division Officer

RECOMMENDED_____ DATE_____
Department Head

QUALIFIED_____ DATE_____
Commanding Officer or Designated Representative

SERVICE RECORD ENTRY_____ DATE_____

# 306 SIGNAL BRIDGE SPOTTER

Estimated completion time: 4 weeks

306.1 PREREQUISITES

**FOR OPTIMUM TRAINING EFFECTIVENESS, THE FOLLOWING ITEMS SHOULD BE COMPLETED PRIOR TO STARTING YOUR ASSIGNED TASKS BUT SHALL BE COMPLETED PRIOR TO FINAL WATCHSTATION QUALIFICATION.**

306.1.1 OTHER QUALIFICATIONS:

Satisfactorily complete identification of all signal flags flash cards within 90 seconds.

Completed _____
(Qualifier and Date)

.2 WATCHSTATIONS FROM THIS PQS:

301 Lookout

Completed _____
(Qualifier and Date)

303 Flag Bag Operator

Completed _____
(Qualifier and Date)

.3 FUNDAMENTALS FROM THIS PQS:

102 Security

Completed _____ 5% of Watchstation
(Qualifier and Date)

108 Call Signs

Completed _____ 5% of Watchstation
(Qualifier and Date)

## 306 SIGNAL BRIDGE SPOTTER (CONT'D)

306.2 TASKS

For the tasks listed below:

A. What are the steps of this procedure?
B. What are the reasons for each step?
C. What control/coordination is required?
D. What means of communications are used?
E. Satisfactorily perform this task.

**Questions**

306.2.1 Demonstrate proper flag bag terminology (3 times) A B C D E

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.2 Spot incoming flaghoist signals (3 times) A B C D E

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.3 Verify own ship repeats flaghoist correctly (3 times) A B C D E

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

## 306 SIGNAL BRIDGE SPOTTER (CONT'D)

**Questions**

306.2.4 Confirm visual responsibilities to other ships in company (3 times) A B C D E

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.5 Direct flaghoist signal to be hauled down following motions of originator (3 times) A B C D E

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.6 Spot outgoing flaghoist signals (3 times) A B C D E

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.7 Correct improper flaghoist (3 times) A B C D E

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

## 306 SIGNAL BRIDGE SPOTTER (CONT'D)

**Questions**

306.2.8 Cancel flaghoist (3 times) A B C D E

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

COMPLETED .2 AREA COMPRISES 40% OF WATCHSTATION.

306.3 INFREQUENT TASKS – None to be discussed.

306.4 ABNORMAL CONDITIONS

For the abnormal conditions listed below:

A. What immediate action is required?
B. What are the probable causes?
C. What operating limitations are imposed?
D. What emergencies or malfunctions may occur if immediate action is not taken?
E. Satisfactorily perform or simulate the corrective/immediate action for this abnormal condition.

**Questions**

306.4.1 Hoist tangled in a rotating radar antenna A B C D E

_____
(Signature and Date)

.2 Loss of flaghoist A B C D E

_____
(Signature and Date)

.3 Loss of visibility A B C D E

_____
(Signature and Date)

COMPLETED .4 AREA COMPRISES 20% OF WATCHSTATION.

## 306 SIGNAL BRIDGE SPOTTER (CONT'D)

306.5 EMERGENCIES

For the emergencies listed below:

A. What indications and alarms are received?
B. What operating limitations are imposed?
C. What other emergencies or malfunctions may occur if immediate action is not taken?
D. What immediate action is required?
E. Satisfactorily perform or simulate the immediate action for this emergency.

| | | **Questions** |
|---|---|---|
| 306.5.1 | Man overboard | A B C D E |
| | _____ (Signature and Date) | |
| .2 | Emergency breakaway | A B C D E |
| | _____ (Signature and Date) | |
| .3 | Breakdown | A B C D E |
| | _____ (Signature and Date) | |
| .4 | Helo crash on deck | A B C D E |
| | _____ (Signature and Date) | |
| .5 | Shipboard fire | A B C D E |
| | _____ (Signature and Date) | |

COMPLETED .5 AREA COMPRISES 10% OF WATCHSTATION.

## 306 SIGNAL BRIDGE SPOTTER (CONT'D)

306.6 WATCHES

306.6.1 Stand the following watches under qualified supervision:

Signal Bridge Spotter (3 times)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

COMPLETED .6 AREA COMPRISES 20% OF WATCHSTATION.

306.7 EXAMINATIONS (OPTIONAL EXCEPT AS REQUIRED BY TYCOM/ISIC, ETC.)

306.7.1 EXAMINATIONS — Pass a written examination

_____
(Signature and Date)

.2 EXAMINATIONS — Pass an oral examination board

_____
(Signature and Date)

# 307 SEARCHLIGHT OPERATOR

NAME_____ RATE/RANK_____

This page is to be used as a record of satisfactory completion of designated sections of the Personnel Qualification Standard (PQS). Only specified supervisors may signify completion of applicable sections either by written or oral examination, or by observation of performance. The examination or checkout need not cover every item; however, a sufficient number should be covered to demonstrate the examinee's knowledge. Should supervisors *give away* their signatures, unnecessary difficulties can be expected in future routine operations.

A copy of this completed page shall be kept in the individual's training jacket.

---

The trainee has completed all PQS requirements for this watchstation. Recommend designation as a qualified SEARCHLIGHT OPERATOR (NAVEDTRA 43354-C).

RECOMMENDED_____ DATE_____
Supervisor

RECOMMENDED_____ DATE_____
Division Officer

RECOMMENDED_____ DATE_____
Department Head

QUALIFIED_____ DATE_____
Commanding Officer or Designated Representative

SERVICE RECORD ENTRY_____ DATE_____

# 307 SEARCHLIGHT OPERATOR

Estimated completion time: 4 weeks

307.1 PREREQUISITES

**FOR OPTIMUM TRAINING EFFECTIVENESS, THE FOLLOWING ITEMS SHOULD BE COMPLETED PRIOR TO STARTING YOUR ASSIGNED TASKS BUT SHALL BE COMPLETED PRIOR TO FINAL WATCHSTATION QUALIFICATION.**

307.1.1 Watchstations From This PQS:

302 Signal Bridge Recorder/Messenger

Completed _____
(Qualifier and Date)

.2 FUNDAMENTALS FROM THIS PQS:

108 Call Signs

Completed _____ 5% of Watchstation
(Qualifier and Date)

109 Flashing Light Procedures

Completed _____ 5% of Watchstation
(Qualifier and Date)

115 Night Observation Devices (NODs)

Completed _____ 5% of Watchstation
(Qualifier and Date)

.3 SYSTEMS FROM THIS PQS:

203 Incandescent Searchlight

Completed _____ 5% of Watchstation
(Qualifier and Date)

204 Mercury-Xenon Searchlight

Completed _____ 5% of Watchstation
(Qualifier and Date)

## 307 SEARCHLIGHT OPERATOR (CONT'D)

307.1.3 205 Multipurpose Signal Light

Completed _____ 5% of Watchstation
(Qualifier and Date)

206 Yardarm Blinker/Infrared Beacon

Completed _____ 5% of Watchstation
(Qualifier and Date)

207 Night Observation Devices (NODs)

Completed _____ 5% of Watchstation
(Qualifier and Date)

307.2 TASKS

For the tasks listed below:

A. What are the steps of this procedure?
B. What are the reasons for each step?
C. What means of communications are used?
D. What safety precautions must be observed?
E. Satisfactorily perform this task.

**Questions**

307.2.1 Select/Install screening hoods/filters for the following situations:

a. Normal underway steaming A B C D E

_____
(Signature and Date)

b. Underway replenishment A B C D E

_____
(Signature and Date)

c. Flight operations A B C D E

_____
(Signature and Date)

d. NVG operations A B C D E

_____
(Signature and Date)

## 307 SEARCHLIGHT OPERATOR (CONT'D)

**Questions**

307.2.1 e. Infrared operations — A B C D E

_____
(Signature and Date)

.2 Energize/de-energize searchlight — A B D E

_____
(Signature and Date)

.3 Verify proper focus of light beam (mercury-xenon) — A B E

_____
(Signature and Date)

.4 Transmit message by flashing light (3 times) — A B D E

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.5 Receive message by flashing light (3 times) — A B D E

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.6 Communicate using infrared light (3 times) — A B D E

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

COMPLETED .2 AREA COMPRISES 15% OF WATCHSTATION.

## 307 SEARCHLIGHT OPERATOR (CONT'D)

307.3 INFREQUENT TASKS

For the infrequent tasks listed below:

A. What are the steps of this procedure?
B. What are the reasons for each step?
C. What control/coordination is required?
D. What means of communications are used?
E. What safety precautions must be observed??
F. What parameters must be monitored?
G. How are the monitored parameters changed by this infrequent task?
H. Satisfactorily perform or simulate this infrequent task.

| | | **Questions** |
|---|---|---|
| 307.3.1 | Utilize signal light as searchlight | A B C D E G H |

_____
(Signature and Date)

| | | |
|---|---|---|
| .2 | Set EMCON conditions | A B C D E F G H |

_____
(Signature and Date)

COMPLETED .3 AREA COMPRISES 5% OF WATCHSTATION.

307.4 ABNORMAL CONDITIONS

For the abnormal conditions listed below:

A. What indications and alarms are received?
B. What immediate action is required?
C. What are the probable causes?
D. What operating limitations are imposed?
E. What emergencies or malfunctions may occur if immediate action is not taken?
F. Satisfactorily perform or simulate the corrective/immediate action for this abnormal condition.

| | | **Questions** |
|---|---|---|
| 307.4.1 | Searchlight casualty | A B C D E F |

_____
(Signature and Date)

## 307 SEARCHLIGHT OPERATOR (CONT'D)

| | | Questions |
|---|---|---|
| 307.4.2 | Loss of power | A B C D F |

_____
(Signature and Date)

| | | |
|---|---|---|
| .3 | Overheating equipment | A B C D E F |

_____
(Signature and Date)

| | | |
|---|---|---|
| .4 | Arcing noise | A B C D E F |

_____
(Signature and Date)

| | | |
|---|---|---|
| .5 | Fluctuating intensity of light | B C D E F |

_____
(Signature and Date)

| | | |
|---|---|---|
| .6 | Humming noise | B C D E F |

_____
(Signature and Date)

COMPLETED .4 AREA COMPRISES 10% OF WATCHSTATION.

307.5 EMERGENCIES

For the emergencies listed below:

A. What indications and alarms are received?
B. What immediate action is required?
C. What are the probable causes?
D. What other emergencies or malfunctions may occur if immediate action is not taken?
E. Satisfactorily perform or simulate the immediate action for this emergency.

| | | Questions |
|---|---|---|
| 307.5.1 | Electrical shock | A B C D E |

_____
(Signature and Date)

| | | |
|---|---|---|
| .2 | Fire | A B C D E |

_____
(Signature and Date)

COMPLETED .5 AREA COMPRISES 10% OF WATCHSTATION.

## 307 SEARCHLIGHT OPERATOR (CONT'D)

307.6 WATCHES

307.6.1 Stand the following watches under qualified supervision:

Searchlight Operator (5 times)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

COMPLETED .6 AREA COMPRISES 20% OF WATCHSTATION.

307.7 EXAMINATIONS (OPTIONAL EXCEPT AS REQUIRED BY TYCOM/ISIC, ETC.)

307.7.1 EXAMINATIONS — Pass a written examination

_____
(Signature and Date)

.2 EXAMINATIONS — Pass an oral examination board

_____
(Signature and Date)

# 308 AN/KAS-1, 1A, CHEMICAL WARFARE DIRECTIONAL DETECTOR OPERATOR

NAME_____ RATE/RANK_____

This page is to be used as a record of satisfactory completion of designated sections of the Personnel Qualification Standard (PQS). Only specified supervisors may signify completion of applicable sections either by written or oral examination, or by observation of performance. The examination or checkout need not cover every item; however, a sufficient number should be covered to demonstrate the examinee's knowledge. Should supervisors *give away* their signatures, unnecessary difficulties can be expected in future routine operations.

A copy of this completed page shall be kept in the individual's training jacket.

---

The trainee has completed all PQS requirements for this watchstation. Recommend designation as a qualified AN/KAS -1, 1A, CHEMICAL WARFARE DIRECTIONAL DETECTOR OPERATOR (NAVEDTRA 43354-C).

RECOMMENDED_____ DATE_____
Supervisor

RECOMMENDED_____ DATE_____
Division Officer

RECOMMENDED_____ DATE_____
Department Head

QUALIFIED_____ DATE_____
Commanding Officer or Designated Representative

SERVICE RECORD ENTRY_____ DATE_____

# 308 AN/KAS-1, 1A, CHEMICAL WARFARE DIRECTIONAL DETECTOR OPERATOR

Estimated completion time: 4 weeks

308.1 PREREQUISITES

**FOR OPTIMUM TRAINING EFFECTIVENESS, THE FOLLOWING ITEMS SHOULD BE COMPLETED PRIOR TO STARTING YOUR ASSIGNED TASKS BUT SHALL BE COMPLETED PRIOR TO FINAL WATCHSTATION QUALIFICATION.**

308.1.1 OTHER QUALIFICATIONS:

View videotape 800158DN, Introduction to AN/KAS-1, 1A, Chemical Warfare Directional Detector

Completed _____
(Qualifier and Date)

View videotape 800157DN, Installation, Maintenance and Operation of AN/KAS-1, 1A, Chemical Warfare Directional Detector

Completed _____
(Qualifier and Date)

.2 Watchstations From This PQS:

301 Lookout

Completed _____
(Qualifier and Date)

308.2 TASKS

For the tasks listed below:

A. What are the steps of this procedure?
B. What are the reasons for each step?
C. What control/coordination is required?
D. What safety precautions must be observed?
E. What parameters/operating limits must be monitored?
F. Satisfactorily perform this task.

| | | **Questions** |
|---|---|---|
| 308.2.1 | Set up AN/KAS-1, 1A, CWDD (2 times) | A B C D E F |

_____
(Signature and Date)

_____
(Signature and Date)

## 308 AN/KAS-1, 1A, CHEMICAL WARFARE DIRECTIONAL DETECTOR OPERATOR (CONT'D)

**Questions**

308.2.2 Perform operational test on AN/KAS-1, 1A, CWDD (2 times) A B D E F

_____
(Signature and Date)

_____
(Signature and Date)

.3 Operate AN/KAS-1, 1A, CWDD (2 times) A B C D E F

_____
(Signature and Date)

_____
(Signature and Date)

.4 Stow AN/KAS-1, 1A, CWDD (2 times) A B C D F

_____
(Signature and Date)

_____
(Signature and Date)

.5 Purge AN/KAS-1, 1A, CWDD (2 times) A B C D F

_____
(Signature and Date)

_____
(Signature and Date)

COMPLETED .2 AREA COMPRISES 40% OF WATCHSTATION.

308.3 INFREQUENT TASKS None to be discussed.

## 308 AN/KAS-1, 1A, CHEMICAL WARFARE DIRECTIONAL DETECTOR OPERATOR (CONT'D)

308.4 ABNORMAL CONDITIONS

For the abnormal conditions listed below:

A. What indications and alarms are received?
B. What immediate action is required?
C. What are the probable causes?
D. What operating limitations are imposed?
E. What emergencies or malfunctions may occur if immediate action is not taken?
F. Satisfactorily perform or simulate the corrective/immediate action for this abnormal condition.

| | | **Questions** |
|---|---|---|
| 308.4.1 | Loss of electrical power | A B C D E F |

_____
(Signature and Date)

COMPLETED .4 AREA COMPRISES 20% OF WATCHSTATION.

308.5 EMERGENCIES

For the emergencies listed below:

A. What indications and alarms are received?
B. What immediate action is required?
C. What are the probable causes?
D. What operating limitations are imposed?
E. What other emergencies or malfunctions may occur if immediate action is not taken?
F. Satisfactorily perform or simulate the immediate action for this emergency.

| | | **Questions** |
|---|---|---|
| 308.5.1 | Electrical shock | A B C D E F |

_____
(Signature and Date)

COMPLETED .5 AREA COMPRISES 10% OF WATCHSTATION.

## 308 AN/KAS-1, 1A, CHEMICAL WARFARE DIRECTIONAL DETECTOR OPERATOR (CONT'D)

308.6 WATCHES

308.6.1 STAND THE FOLLOWING WATCHES UNDER QUALIFIED SUPERVISION:

AN/KAS-1, 1A, Chemical Warfare Directional Detector Operator (3 times)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

COMPLETED .6 AREA COMPRISES 30% OF WATCHSTATION.

308.7 EXAMINATIONS (OPTIONAL EXCEPT AS REQUIRED BY TYCOM/ISIC, ETC.)

308.7.1 EXAMINATIONS — Pass a written examination

_____
(Signature and Date)

.2 EXAMINATIONS — Pass an oral examination board

_____
(Signature and Date)

# 309 SEMAPHORE OPERATOR

NAME_____ RATE/RANK_____

This page is to be used as a record of satisfactory completion of designated sections of the Personnel Qualification Standard (PQS). Only specified supervisors may signify completion of applicable sections either by written or oral examination, or by observation of performance. The examination or checkout need not cover every item; however, a sufficient number should be covered to demonstrate the examinee's knowledge. Should supervisors *give away* their signatures, unnecessary difficulties can be expected in future routine operations.

A copy of this completed page shall be kept in the individual's training jacket.

---

The trainee has completed all PQS requirements for this watchstation. Recommend designation as a qualified SEMAPHORE OPERATOR (NAVEDTRA 43354-C).

RECOMMENDED_____ DATE_____
Supervisor

RECOMMENDED_____ DATE_____
Division Officer

RECOMMENDED_____ DATE_____
Department Head

QUALIFIED_____ DATE_____
Commanding Officer or Designated Representative

SERVICE RECORD ENTRY_____ DATE_____

# 309 SEMAPHORE OPERATOR

Estimated completion time: 4 weeks

309.1 PREREQUISITES

**FOR OPTIMUM TRAINING EFFECTIVENESS, THE FOLLOWING ITEMS SHOULD BE COMPLETED PRIOR TO STARTING YOUR ASSIGNED TASKS BUT SHALL BE COMPLETED PRIOR TO FINAL WATCHSTATION QUALIFICATION.**

309.1.1 WATCHSTATIONS FROM THIS PQS:

302 Signal Bridge Recorder/Messenger

Completed _____
(Qualifier and Date)

.2 FUNDAMENTALS FROM THIS PQS:

108 Call Signs

Completed _____ 10% of Watchstation
(Qualifier and Date)

110 Semaphore Procedures

Completed _____ 10% of Watchstation
(Qualifier and Date)

309.2 TASKS

For the tasks listed below:

A. What are the steps of this procedure?
B. What are the reasons for each step?
C. Satisfactorily perform this task.

| | **Questions** |
|---|---|
| 309.2.1 Select proper position for transmitting semaphore (2 times) | A B C |

_____
(Signature and Date)

_____
(Signature and Date)

## 309 SEMAPHORE OPERATOR (CONT'D)

**Questions**

309.2.2 Transmit messages by semaphore (5 times) A B C

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.3 Receive messages by semaphore (5 times) A B C

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.4 Call, answer, and receipt by flaghoist (3 times) A B C

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

## 309 SEMAPHORE OPERATOR (CONT'D)

**Questions**
A B C

309.2.5 Call, answer, and receipt by flashing light (3 times)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

COMPLETED .2 AREA COMPRISES 60% OF WATCHSTATION.

309.3 INFREQUENT TASKS – None to be discussed.

309.4 ABNORMAL CONDITIONS – None to be discussed.

309.5 EMERGENCIES – None to be discussed.

309.6 WATCHES

309.6.1 STAND THE FOLLOWING WATCHES UNDER QUALIFIED SUPERVISION:

Semaphore Operator (5 times)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

COMPLETED .6 AREA COMPRISES 20% OF WATCHSTATION.

## 309 SEMAPHORE OPERATOR (CONT'D)

309.7 EXAMINATIONS (OPTIONAL EXCEPT AS REQUIRED BY TYCOM/ISIC, ETC.)

309.7.1 EXAMINATIONS — Pass a written examination

_____
(Signature and Date)

.2 EXAMINATIONS — Pass an oral examination board

_____
(Signature and Date)

# 310 SIGNALMAN OF THE WATCH

NAME_____ RATE/RANK_____

This page is to be used as a record of satisfactory completion of designated sections of the Personnel Qualification Standard (PQS). Only specified supervisors may signify completion of applicable sections either by written or oral examination, or by observation of performance. The examination or checkout need not cover every item; however, a sufficient number should be covered to demonstrate the examinee's knowledge. Should supervisors *give away* their signatures, unnecessary difficulties can be expected in future routine operations.

A copy of this completed page shall be kept in the individual's training jacket.

---

The trainee has completed all PQS requirements for this watchstation. Recommend designation as a qualified SIGNALMAN OF THE WATCH (NAVEDTRA 43354-C).

RECOMMENDED_____ DATE_____
Supervisor

RECOMMENDED_____ DATE_____
Division Officer

RECOMMENDED_____ DATE_____
Department Head

QUALIFIED_____ DATE_____
Commanding Officer or Designated Representative

SERVICE RECORD ENTRY_____ DATE_____

# 310 SIGNALMAN OF THE WATCH

Estimated completion time: 5 weeks

310.1 PREREQUISITES

**FOR OPTIMUM TRAINING EFFECTIVENESS, THE FOLLOWING ITEMS SHOULD BE COMPLETED PRIOR TO STARTING YOUR ASSIGNED TASKS BUT SHALL BE COMPLETED PRIOR TO FINAL WATCHSTATION QUALIFICATION.**

310.1.1 WATCHSTATIONS FROM THIS PQS:

305 Expert Lookout

Completed _____
(Qualifier and Date)

306 Signal Bridge Spotter

Completed _____
(Qualifier and Date)

307 Searchlight Operator

Completed _____
(Qualifier and Date)

308 AN/KAS-1, 1A, Chemical Warfare Directional Detector Operator

Completed _____
(Qualifier and Date)

309 Semaphore Operator

Completed _____
(Qualifier and Date)

.2 FUNDAMENTALS FROM THIS PQS:

114 Honors and Ceremonies

Completed _____ 5% of Watchstation
(Qualifier and Date)

## 310 SIGNALMAN OF THE WATCH (CONT'D)

310.2 TASKS

For the tasks listed below:

A. What are the steps of this procedure?
B. What are the reasons for each step?
C. What control/coordination is required?
D. What means of communications are used?
E. What safety precautions must be observed?
F. Satisfactorily perform this task.

**Questions**

310.2.1 Using the Allied Maritime Tactical Signal Book encode 15 signals (5 times) A B C D F

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.2 Using the Allied Maritime Tactical Signal Book decode 15 signals (5 times) A B C D F

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

## 310 SIGNALMAN OF THE WATCH (CONT'D)

**Questions**

310.2.3 Using the International Code of Signals encode10 signals (3 times) A B C D F

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.4 Using the International Code of Signals decode 10 signals (3 times) A B C D F

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.5 Using the ATP 2, vol. II encode 5 signals (3 times) A B C D F

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.6 Using the ATP 2, vol. II decode 5 signals (3 times) A B C D F

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

## 310 SIGNALMAN OF THE WATCH (CONT'D)

**Questions**

310.2.7 Using the ACP 113 encode 3 international call signs (3 times) A B C D F

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.8 Using the ACP 113 decode 3 international call signs (3 times) A B C D F

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.9 Using the ACP 130 encode 10 numeral pennant call signs (3 times) A B C D F

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.10 Using the ACP 130 decode 10 numeral pennant call signs (3 times) A B C D F

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

## 310 SIGNALMAN OF THE WATCH (CONT'D)

**Questions**

310.2.11 Using the ACP 130 encode 5 special task organization call signs (3 times) A B C D F

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.12 Using the ACP 130 decode 5 special task organization call signs (3 times) A B C D F

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.13 Using the ACP 130 encode 5 unit indicator call signs (3 times) A B C D F

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.14 Using the ACP 130 decode 5 unit indicator call signs (3 times) A B C D F

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

## 310 SIGNALMAN OF THE WATCH (CONT'D)

**Questions**

310.2.15 Using the ACP 130 encode 5 boat call signs (2 times) A B C D F

_____
(Signature and Date)

_____
(Signature and Date)

.16 Using the ACP 130 decode 5 boat call signs (2 times) A B C D F

_____
(Signature and Date)

_____
(Signature and Date)

.17 Using the ACP 131 encode 5 operating signals (3 times) A B C D F

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.18 Using the ACP 131 decode 5 operating signals (3 times) A B C D F

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.19 Using the ACP 100 US SUPP encode 5 address groups (2 times) A B C D F

_____
(Signature and Date)

_____
(Signature and Date)

## 310 SIGNALMAN OF THE WATCH (CONT'D)

**Questions**

310.2.20 Using the ACP 100 US SUPP decode 5 address groups (2 times) A B C D F

_____
(Signature and Date)

_____
(Signature and Date)

.21 Signal during underway replenishment in daylight (3 times) A B C D F

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.22 Signal during underway replenishment at night (3 times) A B C D E F

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.23 Maneuver boat via flaghoist for man overboard (3 times) A B C D F

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

## 310 SIGNALMAN OF THE WATCH (CONT'D)

**Questions**

310.2.24 Maneuver boat utilizing TAPS/ARC signals for man overboard (3 times) A B C D F

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.25 Maneuver boat utilizing pyrotechnic signals for man overboard (3 times) A B C D E F

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.26 Signal (using day shapes) for the following situations:

a. Restricted ability to maneuver (2 times) A B C D F

_____
(Signature and Date)

_____
(Signature and Date)

b. Not under command (2 times) A B C D F

_____
(Signature and Date)

_____
(Signature and Date)

## 310 SIGNALMAN OF THE WATCH (CONT'D)

**Questions**

310.2.26 c. Anchoring (2 times) A B C D F

_____
(Signature and Date)

_____
(Signature and Date)

d. Constrained by draft A B C D F

_____
(Signature and Date)

e. Aground (2 times) A B C D F

_____
(Signature and Date)

_____
(Signature and Date)

.27 Signal by yardarm blinkers (3 times) A B C D E F

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.28 Signal by AN/SAT 2 (3 times) A B C D E F

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

## 310 SIGNALMAN OF THE WATCH (CONT'D)

**Questions**

310.2.29 Signal by multipurpose light (3 times) A B C D E F

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.30 Maintain visual logs and files (at sea) (3 times) A B D F

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.31 Maintain current plot of formation/ships in company (3 times) A B C D F

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.32 Locate/operate own ship's navigation lights (3 times) A B C D E F

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

## 310 SIGNALMAN OF THE WATCH (CONT'D)

**Questions**

210.2.33 Assist signalman supervisor in conducting/rendering honors and ceremonies (3 times) A B C D F

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.34 Communicate by delayed executive method utilizing directional procedures (2 times) A B C D E F

_____
(Signature and Date)

_____
(Signature and Date)

.35 Communicate by immediate executive method utilizing directional procedures (2 times) A B C D E F

_____
(Signature and Date)

_____
(Signature and Date)

.36 Communicate by delayed executive method utilizing nondirectional procedures (2 times) A B C D E F

_____
(Signature and Date)

_____
(Signature and Date)

.37 Communicate by immediate executive method utilizing nondirectional procedures (2 times) A B C D E F

_____
(Signature and Date)

_____
(Signature and Date)

## 310 SIGNALMAN OF THE WATCH (CONT'D)

**Questions**
A B C D F

310.2.38 Communicate with conn and CIC by IC systems (3 times)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

COMPLETED .2 AREA COMPRISES 55% OF WATCHSTATION.

310.3 INFREQUENT TASKS – None to be discussed.

310.4 ABNORMAL CONDITIONS – None to be discussed.

310.5 EMERGENCIES – None to be discussed.

310.6 WATCHES

310.6.1 Stand the following watches under qualified supervision:

Signalman of the Watch (5 times)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

COMPLETED .6 AREA COMPRISES 40% OF WATCHSTATION.

## 310 SIGNALMAN OF THE WATCH (CONT'D)

310.7 EXAMINATIONS (OPTIONAL EXCEPT AS REQUIRED BY TYCOM/ISIC, ETC.)

310.7.1 EXAMINATIONS — Pass a written examination

_____
(Signature and Date)

.2 EXAMINATIONS — Pass an oral examination board

_____
(Signature and Date)

# 311 READY BOAT SIGNALMAN

NAME_____ RATE/RANK_____

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A copy of this completed page shall be kept in the individual's training jacket.

---

The trainee has completed all PQS requirements for this watchstation. Recommend designation as a qualified READY BOAT SIGNALMAN (NAVEDTRA 43354-C).

RECOMMENDED_____ DATE_____
Supervisor

RECOMMENDED_____ DATE_____
Division Officer

RECOMMENDED_____ DATE_____
Department Head

QUALIFIED_____ DATE_____
Commanding Officer or Designated Representative

SERVICE RECORD ENTRY_____ DATE_____

# 311 READY BOAT SIGNALMAN

Estimated completion time: 3 weeks

311.1 PREREQUISITES

**FOR OPTIMUM TRAINING EFFECTIVENESS, THE FOLLOWING ITEMS SHOULD BE COMPLETED PRIOR TO STARTING YOUR ASSIGNED TASKS BUT SHALL BE COMPLETED PRIOR TO FINAL WATCHSTATION QUALIFICATION.**

311.1.1 SCHOOLS:

Swimmer Test-Second Class (K-060-2220) (REQUIRED)

Completed _____
(Qualifier and Date)

.2 WATCHSTATIONS FROM THIS PQS:

306 Signal Bridge Spotter

Completed _____
(Qualifier and Date)

307 Searchlight Operator

Completed _____
(Qualifier and Date)

311.2 TASKS

For the tasks listed below:

A. What are the steps of this procedure?
B. What are the reasons for each step?
C. What control/coordination is required?
D. What safety precautions must be observed?
E. Satisfactorily perform this task.

| | **Questions** |
|---|---|
| 311.2.1 Receive and transmit messages by multipurpose light (2 times) | A B C D E |

_____
(Signature and Date)

_____
(Signature and Date)

## 311 READY BOAT SIGNALMAN (CONT'D)

**Questions**

311.2.2 Communicate using radio telephone procedures (3 times) A B C E

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.3 Signal by pyrotechnics during small boat recovery of man overboard (3 times) A B C D E

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.4 Interpret and report TAPS/ARC code to Boat Officer (3 times) A B C E

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.5 Interpret and report flaghoist maneuvering signals to Boat Officer (3 times) A B C E

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

COMPLETED .2 AREA COMPRISES 50% OF WATCHSTATION.

## 311 READY BOAT SIGNALMAN (CONT'D)

311.3 INFREQUENT TASKS – None to be discussed.

311.4 ABNORMAL CONDITIONS

For the abnormal conditions listed below:

A. What indications and alarms are received?
B. What immediate action is required?
C. What are the probable causes?
D. Satisfactorily perform or simulate the corrective/immediate action for this abnormal condition.

**Questions**

311.4.1 Loss of communications (2 times) A B C D

_____
(Signature and Date)

_____
(Signature and Date)

COMPLETED .4 AREA COMPRISES 15% OF WATCHSTATION.

311.5 EMERGENCIES

For the emergencies listed below:

A. What indications and alarms are received?
B. What immediate action is required?
C. What operating limitations are imposed?
D. How does this emergency affect other operations/equipment/watchstations?
E. Satisfactorily perform or simulate the immediate action for this emergency.

**Questions**

311.5.1 Man overboard A B C D E

_____
(Signature and Date)

.2 Fire/flooding in boat A B C D E

_____
(Signature and Date)

COMPLETED .5 AREA COMPRISES 15% OF WATCHSTATION.

## 311 READY BOAT SIGNALMAN (CONT'D)

311.6 WATCHES

311.6.1 STAND THE FOLLOWING WATCHES UNDER QUALIFIED SUPERVISION:

Ready Boat Signalman (3 times)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

COMPLETED .6 AREA COMPRISES 20% OF WATCHSTATION.

311.7 EXAMINATIONS (OPTIONAL EXCEPT AS REQUIRED BY TYCOM/ISIC, ETC.)

311.7.1 EXAMINATIONS — Pass a written examination

_____
(Signature and Date)

.2 EXAMINATIONS — Pass an oral examination board

_____
(Signature and Date)

# 312 AMPHIBIOUS SIGNALMAN

NAME_____ RATE/RANK_____

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A copy of this completed page shall be kept in the individual's training jacket.

---

The trainee has completed all PQS requirements for this watchstation. Recommend designation as a qualified AMPHIBIOUS SIGNALMAN (NAVEDTRA 43354-C).

RECOMMENDED_____ DATE_____
Supervisor

RECOMMENDED_____ DATE_____
Division Officer

RECOMMENDED_____ DATE_____
Department Head

QUALIFIED_____ DATE_____
Commanding Officer or Designated Representative

SERVICE RECORD ENTRY_____ DATE_____

# 312 AMPHIBIOUS SIGNALMAN

Estimated completion time: 2 weeks

312.1 PREREQUISITES

**FOR OPTIMUM TRAINING EFFECTIVENESS, THE FOLLOWING ITEMS SHOULD BE COMPLETED PRIOR TO STARTING YOUR ASSIGNED TASKS BUT SHALL BE COMPLETED PRIOR TO FINAL WATCHSTATION QUALIFICATION.**

312.1.1 WATCHSTATIONS FROM THIS PQS:

311 Ready Boat Signalman

Completed _____
(Qualifier and Date)

.2 FUNDAMENTALS FROM THIS PQS:

117 Amphibious Signaling

Completed _____ 10% of Watchstation
(Qualifier and Date)

.3 SYSTEMS FROM THIS PQS:

208 Debarkation Light Box

Completed _____ 10% of Watchstation
(Qualifier and Date)

312.2 TASKS

For the tasks listed below:

A. What are the steps of this procedure?
B. What are the reasons for each step?
C. What control/coordination is required?
D. What means of communications are used?
E. Satisfactorily perform this task.

**Questions**

312.2.1 Identify various ships involved in amphibious operations by day (2 times) A B C D E

_____
(Signature and Date)

_____
(Signature and Date)

## 312 AMPHIBIOUS SIGNALMAN (CONT'D)

**Questions**

312.2.2 Identify various ships involved in amphibious operations by night (2 times) A B C D E

_____
(Signature and Date)

_____
(Signature and Date)

.3 Identify boats, crafts, and amphibious vehicles by day (2 times) A B C D E

_____
(Signature and Date)

_____
(Signature and Date)

.4 Identify boats, crafts, and amphibious vehicles by night (2 times) A B C D E

_____
(Signature and Date)

_____
(Signature and Date)

.5 Receive, interpret, and report grid positions (2 times) A B C D E

_____
(Signature and Date)

_____
(Signature and Date)

.6 Identify beach markers by day (2 times) A B C D E

_____
(Signature and Date)

_____
(Signature and Date)

## 312 AMPHIBIOUS SIGNALMAN (CONT'D)

**Questions**
A B C D E

312.2.7 Identify beach markers by night (2 times)

_____
(Signature and Date)

_____
(Signature and Date)

COMPLETED .2 AREA COMPRISES 50% OF WATCHSTATION.

312.3 INFREQUENT TASKS – None to be discussed.

312.4 ABNORMAL CONDITIONS – None to be discussed

312.5 EMERGENCIES

For the emergencies listed below:

A. What indications and alarms are received?
B. What immediate action is required?
C. What operating limitations are imposed?
D. How does this emergency affect other operations/equipment/watchstations?
E. Satisfactorily perform or simulate the immediate action for this emergency.

**Questions**
A B C D E

312.5.1 AAV Emergency

_____
(Signature and Date)

COMPLETED .5 AREA COMPRISES 30% OF WATCHSTATION.

312.6 WATCHES - None

312.7 EXAMINATIONS (OPTIONAL EXCEPT AS REQUIRED BY TYCOM/ISIC, ETC.)

312.7.1 EXAMINATIONS — Pass a written examination

_____
(Signature and Date)

.2 EXAMINATIONS — Pass an oral examination board

_____
(Signature and Date)

# 313 SIGNALMAN WATCH SUPERVISOR

NAME_____ RATE/RANK_____

This page is to be used as a record of satisfactory completion of designated sections of the Personnel Qualification Standard (PQS). Only specified supervisors may signify completion of applicable sections either by written or oral examination, or by observation of performance. The examination or checkout need not cover every item; however, a sufficient number should be covered to demonstrate the examinee's knowledge. Should supervisors *give away* their signatures, unnecessary difficulties can be expected in future routine operations.

A copy of this completed page shall be kept in the individual's training jacket.

---

The trainee has completed all PQS requirements for this watchstation. Recommend designation as a qualified SIGNALMAN WATCH SUPERVISOR (NAVEDTRA 43354-C).

RECOMMENDED_____ DATE_____
Supervisor

RECOMMENDED_____ DATE_____
Division Officer

RECOMMENDED_____ DATE_____
Department Head

QUALIFIED_____ DATE_____
Commanding Officer or Designated Representative

SERVICE RECORD ENTRY_____ DATE_____

# 313 SIGNALMAN WATCH SUPERVISOR

Estimated completion time: 4 weeks

313.1 PREREQUISITES

**FOR OPTIMUM TRAINING EFFECTIVENESS, THE FOLLOWING ITEMS SHOULD BE COMPLETED PRIOR TO STARTING YOUR ASSIGNED TASKS BUT SHALL BE COMPLETED PRIOR TO FINAL WATCHSTATION QUALIFICATION.**

313.1.1 WATCHSTATIONS FROM THIS PQS:

310 Signalman of the Watch

Completed _____
(Qualifier and Date)

313.2 TASKS

For the tasks listed below:

A. What are the steps of this procedure?
B. What are the reasons for each step?
C. What control/coordination is required?
D. What safety precautions must be observed?
E. Satisfactorily perform this task.

| | | **Questions** |
|---|---|---|
| 313.2.1 | Verify compliance with all command instructions and visual communications instructions/publications | A B E |

_____
(Signature and Date)

| | | |
|---|---|---|
| .2 | Train watch personnel in the enacting of emergency bills (3 times) | A B C D E |

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

## 313 SIGNALMAN WATCH SUPERVISOR (CONT'D)

**Questions**

313.2.3 Review visual station files and visual log (3 times) A B E

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.4 Inform watch section of composition, organization, and formation of all units in company (3 times) A B C E

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.5 Verify that current watch-to-watch publication inventory is maintained A B C E

_____
(Signature and Date)

.6 Train watch section in the use and location of emergency signal equipment (3 times) A B C D E

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

## 313 SIGNALMAN WATCH SUPERVISOR (CONT'D)

**Questions**

313.2.7 Train watch section in visual relay responsibilities (3 times) A B E

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.8 Observe and evaluate training with watch team (3 times) A B C D E

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.9 Assist in rendering appropriate honors and ceremonies as situation warrants (3 times) A B C E

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.10 Identify shipping by hull characteristics (3 times) A B E

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

## 313 SIGNALMAN WATCH SUPERVISOR (CONT'D)

**Questions**

313.2.11 Prepare maritime report work sheet (3 times) A B C E

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.12 Review message traffic (3 times) A B E

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.13 Prepare exercise messages for transmission IAW FXP-3 (3 times) A B C E

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

.14 Prepare service (SVC) message for transmission (3 times) A B C E

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

## 313 SIGNALMAN WATCH SUPERVISOR (CONT'D)

| | | Questions |
|---|---|---|
| 313.2.15 | Prepare abbreviated service message for transmission (3 times) | A B E |

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

COMPLETED .2 AREA COMPRISES 40% OF WATCHSTATION.

313.3 INFREQUENT TASKS

For the infrequent tasks listed below:

A. What are the steps of this procedure?
B. What are the reasons for each step?
C. What control/coordination is required?
D. What safety precautions must be observed?
E. Satisfactorily perform or simulate this infrequent task.

| | | Questions |
|---|---|---|
| 313.3.1 | Complete special sea and anchor detail checklist | A B C D E |

_____
(Signature and Date)

COMPLETED .3 AREA COMPRISES 10% OF WATCHSTATION.

313.4 ABNORMAL CONDITIONS

For the abnormal conditions listed below:

A. What immediate action is required?
B. What are the probable causes?
C. What follow-up action is required?
D. Satisfactorily perform or simulate the corrective/immediate action for this abnormal condition.

| | | Questions |
|---|---|---|
| 313.4.1 | Message nondelivery | A B C D |

_____
(Signature and Date)

COMPLETED .4 AREA COMPRISES 10% OF WATCHSTATION.

## 313 SIGNALMAN WATCH SUPERVISOR (CONT'D)

313.5 EMERGENCIES

For the emergencies listed below:

A. What indications and alarms are received?
B. What immediate action is required?
C. What are the probable causes?
D. What operating limitations are imposed?
E. What other emergencies or malfunctions may occur if immediate action is not taken?
F. What follow-up action is required?
G. Satisfactorily perform or simulate the immediate action for this emergency.

| | | **Questions** |
|---|---|---|
| 313.5.1 | Loss of electrical power | A B C D E F G |
| | _____ (Signature and Date) | |
| .2 | Fire | A B C D E F G |
| | _____ (Signature and Date) | |
| .3 | Electrical shock | A B C D E F G |
| | _____ (Signature and Date) | |

COMPLETED .5 AREA COMPRISES 20% OF WATCHSTATION.

## 313 SIGNALMAN WATCH SUPERVISOR (CONT'D)

313.6 WATCHES

313.6.1 Stand the following watches under qualified supervision:

Signalman Watch Supervisor (5 times)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

_____
(Signature and Date)

COMPLETED .6 AREA COMPRISES 20% OF WATCHSTATION.

313.7 EXAMINATIONS (OPTIONAL EXCEPT AS REQUIRED BY TYCOM/ISIC, ETC.)

313.7.1 EXAMINATIONS — Pass a written examination

_____
(Signature and Date)

.2 EXAMINATIONS — Pass an oral examination board

_____
(Signature and Date)

# QUALIFICATION PROGRESS SUMMARY FOR VISUAL COMMUNICATIONS

NAME_____ RATE/RANK_____

This qualification progress summary is used to track the progress of a trainee in the watchstations for this PQS and ensure awareness of remaining tasks. It should be kept by the individual or in the individual's training jacket and updated with an appropriate signature (Training Petty Officer, Division Officer, Senior Watch Officer, etc.) as watchstations are completed.

---

301 LOOKOUT

Completed _____ Date_____
(Signature)

---

302 SIGNAL BRIDGE RECORDER/MESSENGER

Completed _____ Date_____
(Signature)

---

303 FLAG BAG OPERATOR

Completed _____ Date_____
(Signature)

---

304 IN-PORT DUTY SIGNALMAN

Completed _____ Date_____
(Signature)

---

# QUALIFICATION PROGRESS SUMMARY FOR VISUAL COMMUNICATIONS (CONT'D)

305 EXPERT LOOKOUT

Completed _____ Date_____
(Signature)

306 SIGNAL BRIDGE SPOTTER

Completed _____ Date_____
(Signature)

307 SEARCHLIGHT OPERATOR

Completed _____ Date_____
(Signature)

308 AN/KAS-1, 1A, CHEMICAL WARARE DIRECTIONAL DETECTOR OPERATOR

Completed _____ Date_____
(Signature)

309 SEMAPHORE OPERATOR

Completed _____ Date_____
(Signature)

310 SIGNALMAN OF THE WATCH

Completed _____ Date_____
(Signature)

311 READY BOAT SIGNALMAN

Completed _____ Date_____
(Signature)

# QUALIFICATION PROGRESS SUMMARY FOR VISUAL COMMUNICATIONS (CONT'D)

312 AMPHIBIOUS SIGNALMAN

Completed _____ Date_____
(Signature)

313 SIGNALMAN WATCH SUPERVISOR

Completed _____ Date_____
(Signature)

# LIST OF REFERENCES USED IN THIS PQS

ACP 130, Communication Instructions, Signaling Procedures in the Visual Medium
ACP 131(E), Communications Instructions, Operating Signals
ATP 1(C), Allied Maritime Tactical Signal and Maneuvering Book, Vol. II
Bluejackets' Manual, 22nd Edition
COMDTINST M16672.2D, Navigation Rules, International - Inland
Jane's All The World's Aircraft
Jane's Fighting Ships
Manufacturer's Operating Instructions
NAVEDTRA 14325, Basic Military Requirements
NAVEDTRA 14244, Signalman 3&2
NAVEDTRA 12968-A, Lookout Training Handbook
NAVSEA S0404-AD-URM-010/TUM, Tag-Out User's Manual (TUM)
NSTM S9086-N2-STM-010/CH-422R3/CH-422, Navigation and Signal Lights
NTP 13(B) Flags, Pennants and Customs
NTP 4(D) Fleet Communications
NWP 22-3 (Rev. B), Ship to Shore Movement
OPNAVINST 3120.32C, Standard Organization and Regulations of the U.S. Navy (SORM)
OPNAVINST 3500.39A, Operational Risk Management (ORM)
OPNAVINST 5100.19D, Navy Occupational Safety and Health (NAVOSH) Program Manual for Forces Afloat
PUB 102, International Code of Signals
SECNAVINST 5510.36, Department of the Navy (DON), Information Security Program (ISP) Regulation
Ship's EMCON Bill
Standard Operating Procedures (SOP)
SW073-AA-MMO-010, Technical Manual for Chemical Warfare Directional Detector, AN/KAS-1, AN/KAS-1A
United States Navy Regulations, 1990

# PERSONNEL QUALIFICATION STANDARD
# Feedback Form for NAVEDTRA 43354-C

From_____Date_____

Via_____Date_____
Department Head

Activity _____

Mailing Address_____

*Email Address* _____DSN_____

PQS Title_____NAVEDTRA_____

Section Affected_____

Page Number(s)_____

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For faster response, you may email your feedback to the PQS Development Group at: N741.pqs@cnet.navy.mil. Please include the above information so that we may better serve you.

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Remarks/Recommendations (Use additional sheets if necessary):

(FOLD HERE)

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DEPARTMENT OF THE NAVY

OFFICIAL BUSINESS

COMMANDING OFFICER
NETPDTC N741
6490 SAUFLEY FIELD ROAD
PENSACOLA FL 32509-5237

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